

CHEMICAL, TISSUE, AND PHYSICAL DATA FROM WATER AND BOTTOM MATERIAL

IN THE LOWER CALCASIEU RIVER, LOUISIANA, 1985-88

By Dennis K. Demcheck, Charles R. Demas, and Charles R. Garrison

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U.S. GEOLOGICAL SURVEY

Open-File Report 89-420



1990

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## CONTENTS

	Page
Abstract .....	1
Introduction .....	1
Study area .....	3
Materials and methods .....	3
Water-quality sampling and analytical methods.....	4
Special studies.....	7
Remobilization of organic compounds from bottom material.....	7
Analysis of bacterial degradation of synthetic organic compounds.....	8
Uptake of synthetic organic compounds by <u>Rangia cuneata</u> .....	8
Use of radon-222 as a tracer of transport across the bed sediment-water interface.....	9
Explanation of tables .....	11
References .....	16

## ILLUSTRATIONS

Figure 1. Map showing location of study area and sampling sites, lower Calcasieu River, Louisiana.....	2
2. Schematic of in situ flux chamber.....	10
3. Map showing extent of dye cloud 1 day after injection into the lower Calcasieu River, Louisiana, January 13, 1987.....	12
4. Map showing location of salinity-profile and in situ water- quality sampling sites for the lower Calcasieu River, Louisiana, February-March 1987.....	13
5. Map showing location of sampling sites during a toxicity- characterization study of the lower Calcasieu River and Bayou d'Inde, Louisiana, June 1988.....	15

## TABLES

Table 1. Lower Calcasieu River at I-10 bridge at Lake Charles, Louisiana, daily:	
A. Gage height data, May 1986 to September 1988.....	20
B. Water temperature data, April 1986 to July 1988.....	25
C. Specific conductance data, April 1986 to July 1988.....	35
D. Velocity data, October 1986 to July 1988.....	45
2. Lower Calcasieu River at Burton Landing Louisiana, daily:	
A. Gage height data, September 1988 to July 1988.....	66
B. Water temperature data, September 1986 to July 1988.....	71
C. Specific conductance data, September 1986 to July 1988...	76
3. Lower Calcasieu River near Cameron, Louisiana, once daily:	
A. Water temperature data, April 1987 to August 1988.....	81
B. Specific conductance data, April 1987 to August 1988....	83
4A. Salinity-profile data, lower Calcasieu River, Louisiana, February and March 1987.....	85
B. Water-quality field data, lower Calcasieu River, Louisiana, May and August 1985 and May and June 1986.....	95

## TABLES--Continued

Page

Table 5.	Particle-size distribution of bottom material, suspended-sediment concentrations, and miscellaneous discharge measurements data from the lower Calcasieu River and Bayou d'Inde area, Louisiana, 1984-87.....	100
6.	Concentrations of volatile solids, nutrients, trace elements, volatile and methylene chloride-extractable organic compounds, and physical data in water and bottom material from the lower Calcasieu River, Louisiana, May 1985.....	104
7.	Concentrations of volatile solids, nutrients, trace elements, volatile and methylene chloride-extractable organic compounds, and physical data in water and bottom material from the lower Calcasieu River, Louisiana, August 1985.....	131
8.	Lead-210 and cesium-137 radioactivity profiles for core samples collected from the lower Calcasieu River, Louisiana, March 12, 1986.....	140
9.	Concentrations of nutrients, trace metals, volatile and methylene chloride-extractable organic compounds, and physical data in water and bottom material from the lower Calcasieu River, Louisiana, May 1986.....	141
10.	Total trace-metal concentration profiles for core samples from the lower Calcasieu River, Louisiana, May 1986.....	155
11.	Concentrations of volatile organic compounds and physical data in water from the lower Calcasieu River and Bayou d'Inde area, Louisiana, April 1987.....	156
12.	Concentrations of methylene chloride-extractable organic compounds and physical data in water and bottom material from the lower Calcasieu River, Louisiana, April 1987.....	163
13.	Concentrations of methylene chloride-extractable organic compounds in bottom material from Bayou d'Inde, Louisiana, April-July 1987.....	169
14.	Concentrations of volatile organic compounds and physical data in water collected from the Bayou d'Inde area, Louisiana, September 1987.....	172
15.	Concentrations of volatile and methylene chloride-extractable organic compounds in water, bottom material, and tissue and physical data collected from the lower Calcasieu River and Bayou d'Inde area, Louisiana, July-September 1987.....	178
16.	Radon-222 activity levels in water and bottom material in Prier Lake, Louisiana, December 1987-February 1988.....	192
17.	Concentrations of methylene chloride-extractable organic compounds in composited tissue samples from the lower Calcasieu River and Bayou d'Inde, Louisiana, May 1986.....	194
18.	Concentrations of inorganic constituents, trace metals, volatile organic compounds, methylene chloride-extractable organic compounds, insecticides, and physical data in water and bottom material from the lower Calcasieu River and Bayou d'Inde area, Louisiana, June 1988.....	198
19.	Concentrations of volatile and methylene chloride-extractable organic compounds and physical data in water, bottom material, and tissue from the lower Calcasieu River and Bayou d'Inde, Louisiana, May 17-June 21, 1988.....	268

## CONVERSION FACTORS AND ABBREVIATIONS

For the convenience of readers who prefer to use metric (International System) units rather than the inch-pound units used in this report, values may be converted by using the following factors:

Multiply inch-pound units	By	To obtain metric units
inch (in.)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
gallon (gal)	3.785	liter (L)
foot per second (ft/s)	0.3048	meter per second (m/s)
cubic foot per second (ft <sup>3</sup> /s)	0.02832	cubic meter per second (m <sup>3</sup> /s)
mile per hour (mi/h)	1.609	kilometer per hour (km/h)
ounce, avoirdupois (oz)	28.35	gram (g)
pound, avoirdupois (lb)	453.6	gram (g)

Temperature in degrees Celsius ( $^{\circ}\text{C}$ ) can be converted to degrees Fahrenheit ( $^{\circ}\text{F}$ ) as follows:  $^{\circ}\text{F} = 1.8 \times ^{\circ}\text{C} + 32$ .

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)--a geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Sea Level Datum of 1929."

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**REFERENCE LIST OF SAMPLING SITE, LATITUDE/LONGITUDE, AND  
LOCATION FOR FIGURE 1**

Site no.	Latitude/ longitude	Location
1	301832093065300	Calcasieu River 3.9 mi east of Moss Bluff, La.
2	301824093063600	Bayou Serpent 4.2 mi east of Moss Bluff, La.
3	301552093123500	West Fork Calcasieu River 1.0 mi northwest of Goosport, La.
4	301404093144800	Calcasieu River at Buoy 130 at Lake Charles La.
5	301240093153000	Calcasieu River at Buoy 114 at Lake Charles La.
6	301150093171600	Calcasieu River at Bayou d'Inde, 2.8 mi southeast of Hollywood, La.
7	300957093190800	Calcasieu River at petroleum refinery, 3.9 mi south of Hollywood, La.
8	08017090 <sup>a</sup>	Calcasieu River at Burton Landing near Lake Charles, La.
9	300606093184400	Calcasieu River at Devil's Elbow, 5.5 mi northwest of Grand Lake, La.
10	300127093184900	Calcasieu Lake 2.3 mi northeast of Hackberry, La.
11	294605093204200	Calcasieu River at Buoy 47, 2.4 mi southwest of Cameron, La.
12	301230093181300	Bayou d'Inde 0.25 mi above industrial outfall canal.
13	301244093171300	Industrial outfall above I-210 bridge near Maplewood, La.
14	301230093180300	Bayou d'Inde at confluence with industrial outfall.
15	301210093173900	Bayou d'Inde 0.5 mi above mouth.

<sup>a</sup> Downstream order number.

**REFERENCE LIST OF SAMPLING SITE, LATITUDE/LONGITUDE, AND  
LOCATION FOR FIGURE 5**

Site no.	Latitude/ longitude	Location
1	301234093173600	Industrial outfall at Lockport Marsh bridge.
2	301234093174900	Industrial outfall canal at bridge 0.25 mi above mouth.
3	301233093180100	Industrial outfall canal 100 ft above mouth.
4	301159093205500	Bayou d'Inde at Little Bayou d'Inde.
5	301205093201800	Bayou d'Inde 1 mi below Little Bayou d'Inde.
6	301203093195900	Bayou d'Inde 0.5 mi above Highway 108.
7	301209093193600	Bayou d'Inde 500 ft above Highway 108.
8	301209093193000	Bayou d'Inde 500 ft below Highway 108.
9	301230093181300	Bayou d'Inde 0.25 mi above industrial outfall canal.
10	301224093174900	Bayou d'Inde 0.25 mi below industrial outfall canal.
11	301210093173900	Bayou d'Inde 0.5 mi above mouth.
12	301153093171900	Bayou d'Inde at mouth near Sulphur, La.
13	301150093171600	Calcasieu River at Bayou d'Inde, 2.8 mi southeast of Hollywood, La.
14	301143093171000	Prien Lake cut at Bayou d'Inde.
15	301127093172400	Priens Lake at northwest shore.
16	301031093171000	Priens Lake outlet (south end).
17	301404093144800	Calcasieu River at Buoy 130 at Lake Charles, La.

CHEMICAL, TISSUE, AND PHYSICAL DATA FROM WATER AND BOTTOM MATERIAL  
IN THE LOWER CALCASIEU RIVER, LOUISIANA, 1985-88

By Dennis K. Demcheck, Charles R. Demas, and Charles R. Garrison

ABSTRACT

The lower Calcasieu River is an estuarine system that has been affected by industrial activity. Prior to 1984, several synthetic organic compounds were detected in an industrialized reach of the lower Calcasieu River. In 1985, the U.S. Geological Survey began a series of studies to determine the processes that control the fate and transport of some of these organic compounds and trace elements in the lower Calcasieu River, Louisiana.

Field and laboratory methods used by the U.S. Geological Survey during studies conducted on the lower Calcasieu River from 1985 to 1988 are described. All data collected during these studies also are presented. Data presented include: Daily velocities, temperatures, and specific conductances; dye-tracer data; salinity-profile data; instantaneous discharges; suspended-sediment concentrations; bottom-material particle-size distributions; major inorganic chemical concentrations, nutrients, and physical constituents in water; trace-metal concentrations in water and bottom material; concentrations of volatile organic and methylene chloride-extractable organic compounds in water, bottom material, and tissue from plants, invertebrates, and fish; concentrations of insecticide compounds in bottom material; cesium-137 and lead-210 radioactivity levels in bottom material; and radon-222 radioactivity levels in water and bottom material.

INTRODUCTION

The lower Calcasieu River, in southwestern Louisiana (fig. 1), is an example of a microtidal estuarine system that has been affected by industrial activity. Contamination of water, bottom material, and aquatic organisms in the lower Calcasieu River with synthetic organic compounds and trace metals has been detected by State and Federal agencies (Michael Schurtz, Louisiana Department of Environmental Quality, written commun., 1985; Philip Crocker, U.S. Environmental Protection Agency, written commun., 1985 and 1986) and by McNeese State University (DeRouen and Stevenson, 1987). Approximately 30 industrial plants border the lower Calcasieu River between Lake Charles and the Intracoastal Waterway.

None of the previous studies, however, has determined the processes that control the fate and transport of these synthetic organic compounds and trace elements in relation to the physical and chemical characteristics of the river. In 1985, the U.S. Geological Survey began a series of studies to

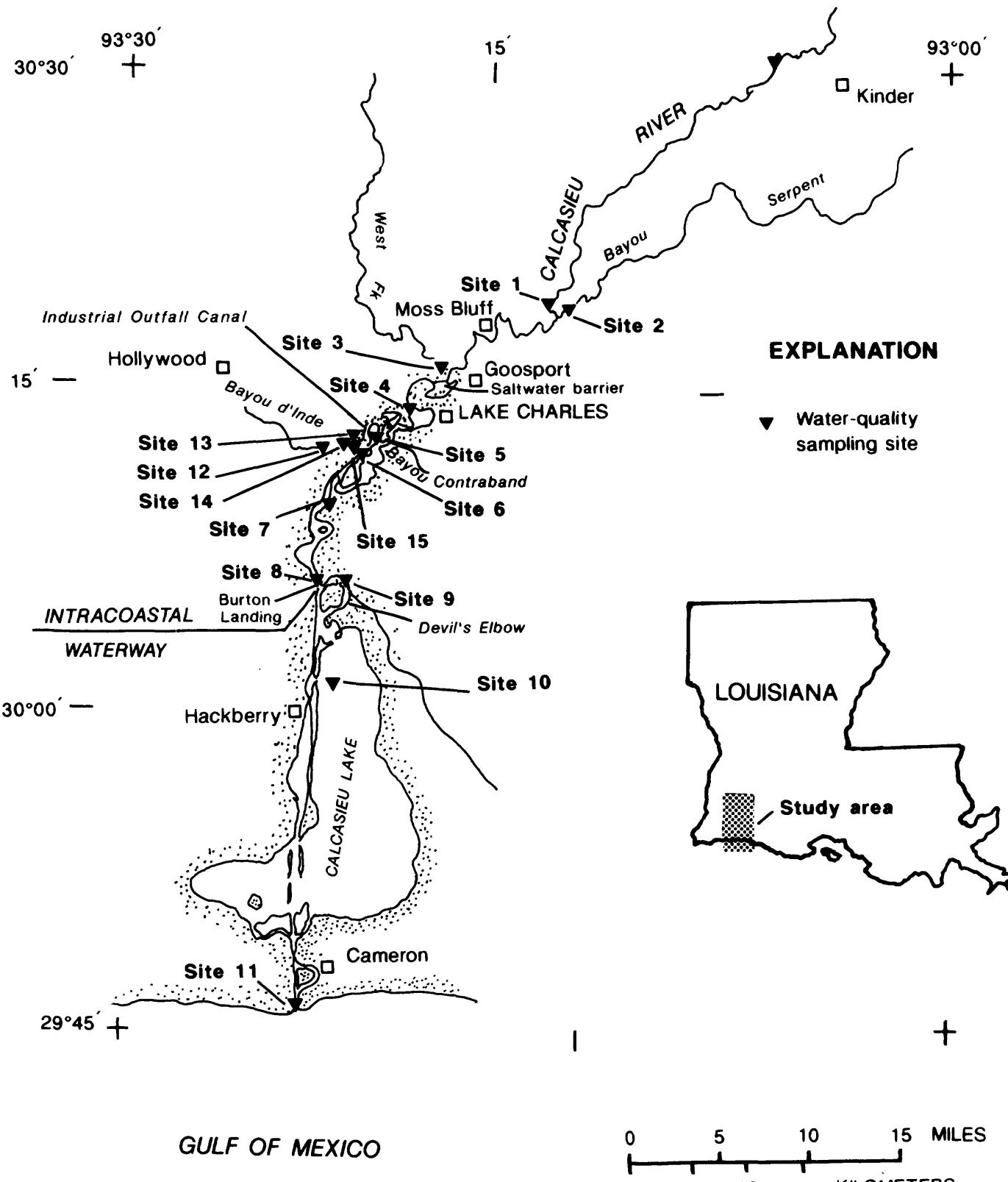


Figure 1.--Location of study area and sampling sites, lower Calcasieu River, Louisiana.

determine the processes that control the fate and transport of organic compounds and trace elements in the industrial reach and in the transition zone between brackish and freshwater of the lower Calcasieu River.

The purposes of this report are to describe the water-quality sampling and analytical methods used in routine sampling and special studies from 1985 to 1988, and provide a single document that contains all the data collected by the U.S. Geological Survey during the different studies. Data presented include: Daily velocities, temperatures, and specific conductances; dye-tracer data; salinity-profile data; instantaneous discharges; suspended-sediment concentrations; bottom-material particle-size distributions; major inorganic chemical concentrations, nutrients, and physical constituents in water; trace-metal concentrations in water and bottom material; concentrations of volatile organic and methylene chloride-extractable organic compounds in water, bottom material, and tissue from plants, invertebrates, and fish; concentrations of insecticide compounds in bottom material; cesium-137 and lead-210 radioactivity levels in bottom material; and radon-222 radioactivity levels in water and bottom material.

#### STUDY AREA

The lower Calcasieu River includes areas that are dominated by freshwater, brackish water, and saltwater. Riparian vegetation varies from bottom-land hardwoods and cypress-tupelo gum swamps in the freshwater areas to marshes in the saltwater areas. The main channel of the lower Calcasieu River is a dredged channel bordered by spoil banks below the city of Lake Charles, Louisiana (fig. 1).

The reach of the lower Calcasieu River investigated during this study extends from Kinder, Louisiana, to Cameron, Louisiana (fig. 1), a total distance of 54 river miles. Cross-sectional widths range from 200 ft at Kinder to 400-600 ft in the ship channel at the outlet to the Gulf of Mexico. Yearly mean discharge for the Calcasieu River at Kinder was 2,730 ft<sup>3</sup>/s for the 1985-87 water years (Carlson and others, 1985; 1986; 1988). Intensive studies were conducted around Bayou d'Inde and the industrialized area extending from Lake Charles to Burton Landing, a reach of approximately 14 mi. Instantaneous-discharge measurements in this tidally-affected reach ranged from -2,370 to +71,000 ft<sup>3</sup>/s during the 1985-87 water years. Instantaneous stream velocities ranged from -0.17 to +4.96 ft/s for the instantaneous measurements in the tidally-affected reach of the lower Calcasieu River during this same time period.

#### MATERIALS AND METHODS

Physical constituents such as dissolved oxygen, pH, temperature, specific conductance, salinity, and oxidation-reduction potential were measured in the water using an *in situ* water-quality monitor. Daily specific-conductance and temperature data were collected at two sites using a U.S. Geological Survey water-quality minimonitor. Additional daily specific-conductance and temperature data were collected by an observer at a third site.

Instantaneous discharge measurements were made in the lower Calcasieu River using an electromagnetic water current meter that provided both direction and magnitude of flow. Additional flow data also were collected on a daily basis at the I-10 bridge site using an electromagnetic water current meter with probes set at 0.2 and 0.8 of the average depth of the river. Data were available on a real-time basis through the use of a Handar-GOES (Geostationary Operational Environmental Satellite) data acquisition system and also were stored on a digital paper-tape recorder.

Dye-tracer studies were conducted on two occasions during the study. The first study was conducted in the main ship channel just above Prien Lake in January 1987. The second study was done in an industrial outfall and Bayou d'Inde in September 1987. Both studies were conducted according to methods in Hubbard and others (1982).

Suspended-sediment samples were collected in water less than 20 ft in depth and velocities less than 1.5 ft/s using a wire-basket sampler. Point samples were collected in water greater than 20 ft in depth and velocities less than 1.5 ft/s at 0.1, 0.3, 0.5, 0.7, and 0.9 of total depth using a horizontally-oriented, messenger-triggered, 6.2 L (liter) Van Dorn sampler. Prior to analysis, samples were transferred to 3.2 L wide-mouth plastic bottles and treated with 5 mL of chlorine bleach (used as a biocide). A P-63 suspended-sediment sampler was used on one occasion when stream velocities exceeded 1.5 ft/s. Prior to analysis, suspended-sediment samples were collected in 500 mL glass bottles at points using the P-63 sampler and treated with 1 mL of chlorine bleach.

Suspended-sediment concentrations and particle-size distributions were determined at a U.S. Geological Survey sediment laboratory, according to methods described in Guy (1969) with the following modifications: Concentrations of fines (<0.0625 mm) were filtered through 0.00045 mm pretreated silver filters and washed with de-ionized water prior to drying. The smaller pore-size filter was used to prevent any material from being washed away when the filters were washed with de-ionized water to minimize the high dissolved-solids concentrations present in the water samples. The dry-sieve method was used for particle-size analysis of the sand fraction. The bottom-withdrawal tube method was used for particle-size analysis of the total-fines fraction.

#### Water-Quality Sampling and Analytical Methods

Depth-integrated water-quality samples for inorganic constituents, trace metals, and methylene chloride-extractable organic compounds were collected from water less than 20 ft in depth and velocities less than 1.5 ft/s using an epoxy-coated, wire-basket sampler containing a clean, fired (at 350 °C for 6 hrs) to burn off any organic contaminants), narrow-mouth 1-L glass bottle. A Johnson-Keck pump with Teflon tubing and a viton stator was used to collect depth-integrated or point samples in water greater than 20 ft in depth and velocities less than 1.5 ft/s. The pump was cleaned with pesticide-grade methanol and rinsed with de-ionized water in the laboratory prior to use, and the pump was rinsed with ambient water at each site prior to use.

Samples for volatile organic compounds (VOCs) were collected in clean, fired, 40-mL glass septum vials with Teflon septums. Vials were placed in stainless-steel sewage samplers that had been cleaned in the laboratory with pesticide-grade methanol and rinsed with de-ionized water. The VOC samples were depth-integrated or collected at points in the river using a messenger-activated stainless-steel sewage sampler. All samplers and sample containers were rinsed with ambient water at the sampling site prior to sampling.

All water samples were preserved and, when required, filtered in the field according to methods listed in Brown and others (1970). All nutrient and organic samples were stored in coolers at 4 °C immediately upon collection, placed in refrigerators in the mobile laboratory after processing, and shipped in coolers at 4 °C to the appropriate laboratories for analysis. Water samples analyzed for major inorganic chemical constituents and trace metals were sent to U.S. Geological Survey laboratories. Samples were analyzed according to methods listed in Fishman and Friedman (1985). Water samples analyzed for VOCs were sent to a Survey laboratory and were analyzed according to methods in Wershaw and others (1983). Water samples collected for dissolved organic carbon fractionation were filtered through a 0.00045 mm silver filter, sent to a commercial laboratory, and analyzed according to methods listed in Leenheer and Huffman (1979). Water samples analyzed for methylene chloride-extractable organic compounds were sent to a Survey laboratory and the Tennessee Valley Authority Laboratory (TVAL), and analyzed according to methods in Wershaw and others (1983) and U.S. Environmental Protection Agency (1979a, 1979b).

Bottom-material samples were collected with a stainless-steel petite-ponar sampler for organic-compound analysis and a Teflon-lined petite-ponar sampler for trace-metal analysis. Samples for particle-size, loss-on-ignition, and total organic carbon analyses were collected from the bottom using a stainless-steel petite-ponar sampler. Core samples were collected from the bottom using a hand corer and a 150-lb gravity corer, depending on sampling depth. Liners made of 2 in. by 20 in. stainless steel or plastic were used with the hand corer. Liners made of 4 in. by 48 in. plastic were used with the gravity corer. Cores were analyzed for trace metals and radioisotopes.

Samples for analysis of particle-size distributions, loss-on-ignition, and percent moisture of bottom material were stored in clean plastic 500 mL containers after collection and analyzed by a Survey sediment laboratory. Mechanical dry-sieve analysis, using standard methods reported by Guy (1969), was used for the samples containing mostly sand. Hydrometer analysis, using methods developed by the U.S. Army Corps of Engineers (1970), was used for the samples containing mostly fines. The particle-size distribution of samples containing both sand and fines were determined by combined sieve and hydrometer analyses. Loss-on-ignition and percent moisture were determined according to methods in Brown and others (1970) and Buckman and Brady (1969).

Bottom-material samples were stored in clean, plastic, 500-mL containers in the field and analyzed for trace metals and nutrients at a Survey laboratory using methods listed in Fishman and Friedman (1985). Nutrient samples were chilled to 4 °C immediately after collection and sent in

coolers at 4 °C to a Survey laboratory. Samples for analysis of methylene chloride-extractable organic compounds in bottom material were placed in clean, fired, 1-L glass bottles and immediately chilled to 4 °C until analysis by the TVAL. Samples were analyzed at the TVAL according to U.S. Environmental Protection Agency (1979b) method 625. Samples for analysis of VOCs in bottom material were stored in 40-mL septum vials at 4 °C until analysis by the TVAL, using a modification of U.S. Environmental Protection Agency (1979a) method 624 (James Bobo, Tennessee Valley Authority, written commun., 1987).

Core samples were extruded in the field and cut into sections according to depth below surface. Sections were then sent to a Survey laboratory for cesium-137 and lead-210 analyses according to methods listed in Thatcher and others (1977). Additional core-sample sections were sent to a Survey laboratory for total trace-metal analysis, according to methods listed in Fishman and Friedman (1985).

Biologic samples were collected using a variety of methods that included gill nets and rod and reel for finfish, commercial crab traps for crabs, and petite-ponar and a biological-dredge sampler for clams. Once collected, biologic specimens were prepared using the following procedure:

1. Upon collection:
  - a. Organisms were separated into species;
  - b. Wrapped in aluminum foil;
  - c. Labeled by site, date, and time;
  - d. Placed in plastic bags; and
  - e. Stored in ice chests and chilled until processed.
2. In the field laboratory:
  - a. Species were measured (total length of fish, total carapace width of crabs, and total shell length of clams) and segregated by size class.
  - b. Specimens were weighed.
  - c. Intestinal contents were removed from specimens.
  - d. Whole specimens, segregated by size class, were placed in a prerinse stainless-steel blender, (1-5 individuals--fish and crabs, 20-25 clams) and blended at 10,000 rotations per minute. A known volume of de-ionized water was added to facilitate blending. The volume of de-ionized water added to the sample was reported to the laboratory. The sample was blended until a uniform mixture was obtained.
  - e. Composited samples were transferred to clean, fired, glass bottles. Bottles were labeled according to species, size, number of organisms composited, site, date, and time. Bottles were placed in a refrigerator, stored at 4 °C, and transported to the laboratory.
  - f. Unblended tissue (fish, crabs, and clams) samples for analysis of volatile organic compounds were stored and labeled using similar techniques as those used to label blended samples.

In addition to the above steps, the following procedures were implemented and samples were analyzed for quality-control purposes.

1. Glassware, utensils, and the blender were rinsed with pesticide-grade methanol and de-ionized water (three rinses). Glassware was then fired at 350 °C for a minimum of 6 hrs at a Survey laboratory.
2. Subsamples of de-ionized water and methanol used in the rinse process were collected and sent to the TVAL for organic-chemical analysis.
3. All tissue samples were sent to Mississippi State University Chemistry Laboratory for organic-chemical analysis. The VOCs in tissue were run using an unpublished modification of U.S. Environmental Protection Agency (1979a) method 624 (Tennessee Valley Authority, written commun., 1987) and considered semi-quantitative data and interpreted accordingly. Organochlorines and polynuclear hydrocarbons in tissue were analyzed using methods developed in cooperation with the U.S. Fish and Wildlife Service (Belisile and others, 1981).

#### SPECIAL STUDIES

##### Remobilization of Organic Compounds from Bottom Material

In April 1987, samples were collected to determine the remobilization of organic compounds from bottom material. A stainless-steel petite-ponar sampler was used to collect 24 L of bottom material at one vertical from Bayou d'Inde near its confluence with an industrial outfall canal (fig. 1). The bottom material was stored in clean, fired, glass bottles at 4 °C until processed. Native water was collected at the mouth of Bayou d'Inde and the Calcasieu River near Kinder, using prerinse (pesticide-grade methanol and de-ionized water) 16-L glass carboys and stored at 4 °C until analyzed. An in situ water-quality monitor was used to record water temperature, pH, dissolved oxygen, salinity, specific conductance, and oxidation-reduction potential when the bottom-material and native-water samples were collected.

Bottom-material samples were composited and mixed for 30 minutes using a Teflon-coated industrial pastry mixer to ensure that representative subsamples were obtained. One set of subsamples of bottom material (after compositing), native water, and de-ionized water were placed in clean, fired, 1-L glass bottles and sent to the TVAL for chemical analysis. Another set of subsamples of bottom material, native water, and de-ionized water was set aside for a procedure that used standard elutriate methods developed by Keeley and Engler (1974). Using the procedure, bottom material from Bayou d'Inde was mixed with native water from either Bayou d'Inde, Calcasieu River near Kinder, or de-ionized water. A 1:4 volumetric ratio of bottom material to water was used in each test. Each mixture was placed in the mixer and vigorously mixed for 30 minutes.

A part of the bottom material-water mixture was poured into Imhoff cones immediately after mixing and rates of deposition were recorded (American Public Health Administration and others, 1981). The remainder of the bottom material-water mixture was placed in a clean, 16-L glass carboy and refrigerated at 4 °C for 1 hr. After settling for 1 hr, a portion of the bottom material-water mixture was decanted into clean, fired, 1-L glass bottles and sent to the TVAL for analysis. The decanted mixture represents the fine material that would remain suspended in the water column after dredging. The other portion of the mixture was centrifuged and then filtered, using 0.001 mm effective pore size, glass-fiber filters in a positive-pressure stainless-steel filtering apparatus that was pressurized with ultra-pure nitrogen gas. Filtered water was collected in clean fired, 1-L glass bottles and sent to the TVAL for analysis of organic compounds, using methods previously described.

#### Analysis of Bacterial Degradation of Synthetic Organic Compounds

Bottom material collected as part of the remobilization study also was used to determine if bacterial degradation of synthetic organic compounds was occurring in the lower Calcasieu River. Subsamples of bottom material were removed after the samples had been composited and mixed to assure uniformity. The bottom material was placed in 16 clean, fired, 100 mL glass bottles. Twelve of the bottled samples were sterilized at the Louisiana State University Nuclear Sciences Laboratory, using a cobalt irradiator. Irradiation times were adjusted to give a total dosage of 1 million Rads of ionizing radiation. Dosimetry was done by the Fricke method (Swallow, 1960), using ferrous sulfate solutions, and also by LIF thermoluminescent chip analysis in the axial position of the diving bell (E.N. Lambremont, Louisiana State University, Department of Nuclear Sciences, written commun., 1987). Irradiation was conducted at ambient temperature (approximately 20 °C) and no increase in sample temperature was noted. Irradiated samples were used to provide samples in which no bacterial degradation could occur.

Three irradiated and three non-irradiated samples were sent to the TVAL for analysis of organic chemicals. Three of the remaining irradiated samples and three non-irradiated samples were placed in a stainless-steel airtight container. The container was purged with ultra-pure nitrogen gas, sealed, and placed in an upright incubator set at 20 °C. Irradiated and non-irradiated samples were incubated at 20 °C for 60 days and then sent to the TVAL for analysis of organic chemicals.

#### Uptake of Synthetic Organic Compounds by *Rangia cuneata*

*Rangia cuneata*, a brackish water clam, were collected to determine their usefulness as a bio-accumulator of synthetic organic compounds and help determine fate and transport of selected organic compounds. *Rangia cuneata* were collected from a large bed in the northwestern corner of Lake Charles (fig. 1), using a biological dredge. Specimens were cleaned with native water, sorted for size, and placed in a clean, galvanized tub prior to placement in holding cages. Cages were constructed of a rubber-coated wire mesh. Approximately 80 specimens were placed in each cage. Cages were placed on or sus-

pended slightly above the bottom at several sites throughout the study area. Cages were retrieved after 35 days, except at one site where 41 days elapsed before retrieval, due to access problems.

Temperature, pH, dissolved oxygen, specific conductance, salinity, and oxidation-reduction potential were recorded at the surface and bottom of the river at each site prior to placement of the clams and immediately after their retrieval using an *in situ* water-quality monitor. Water and bottom-material samples were collected at each site concurrent with collection, placement, and retrieval of the clams and analyzed for VOCs and methylene chloride-extractable organic compounds, using methods described previously.

At the beginning of the study, 40 clams from the Lake Charles bed were composited, and duplicate whole body samples were analyzed for selected methylene chloride-extractable organic compounds. Also, two individual clams from the same bed were analyzed for VOCs at the beginning of the study. Similarly, 40 clams from the Lake Charles bed and a like number from the test sites were analyzed for the selected organic compounds, and 4 clams (including duplicates at one site) were analyzed for VOCs at the end of the study. Clams were frozen immediately after collection and shipped on dry ice to the Mississippi State University Chemistry Laboratory for analysis of organic compounds, using methods described previously.

#### Use of Radon-222 as a Tracer of Transport Across the Bed Sediment-Water Interface

A study was performed to evaluate the usefulness of radon-222 as a tracer to estimate the rate of transport of water-soluble compounds across the bed sediment-water interface in the lower Calcasieu River. Flux chambers (fig. 2) were deployed by divers in Prien Lake, Louisiana (fig. 1), starting in late December 1987 and ending in early February 1988 to determine movement of radon-222 from the bed sediment to the overlying water. Core samples also were collected to verify flux-chamber results and to provide information on diffusion coefficients of radon-222 in Prien Lake.

Two approaches were used to directly measure radon-222 flux into overlying water from the bed sediment. The approaches used involved placement of a confining device on the bed-sediment surface and comparison of radon-222/radium-226 activities at different depths in core samples (Hammond and others, 1977). In the first approach, radon-222 was measured and compared between chambers that were opened and closed to the bed sediment of the lake.

The *in situ* aluminum chambers originally were designed by Region IV of the U.S. Environmental Protection Agency for sediment oxygen demand studies (Murphy and Hicks, 1986). The chamber (fig. 2) consisted of a cylinder with a center core that formed an annular ring (fig. 2). The lid was fastened to the top of the chamber with four wing nuts. The lid was removed during deployment, which facilitated purging of the chamber as it passed through the water. Divers positioned the chamber on the bottom of the lake and then lowered and fastened the lid. The chamber in the deployed position isolates 65 L of water over 0.27 m<sup>2</sup> of bed sediment. Further details of the chamber design are given by Murphy and Hicks (1986).

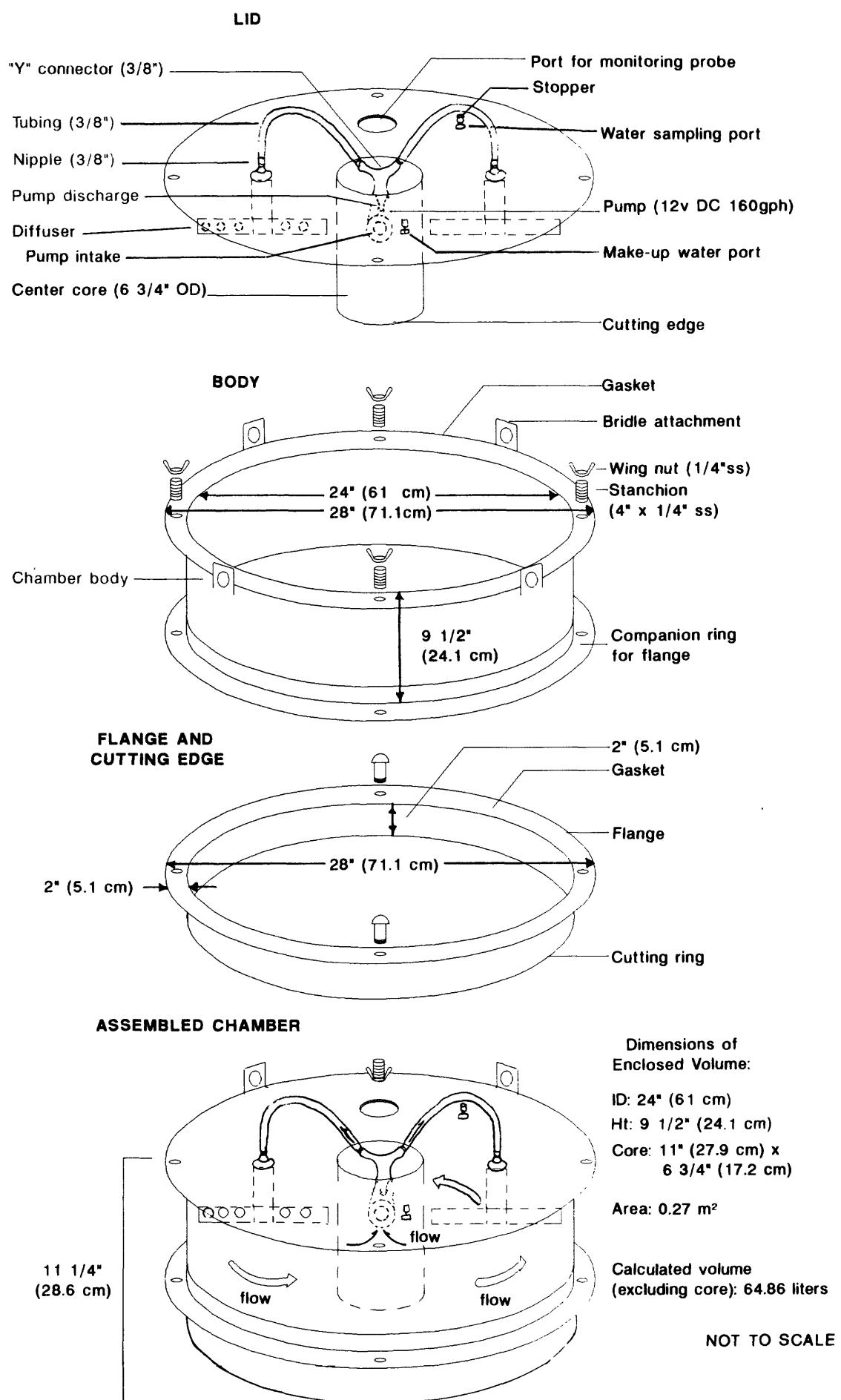


Figure 2.--Schematic of in situ flux chamber.

After the chamber and lid were in position, divers extracted water samples of approximately 200 mL per sample. Duplicate samples were collected from each chamber. These samples were drawn into evacuated samplers through a short tube with a valve extending from the chamber, sealed, and brought to the surface to be analyzed for radon-222.

In the second approach, sedimentary radon-222 (C) and radium-226 activities were obtained from hand cores. The cores were extruded with the aid of a plunger inserted from the bottom of the core liner. The cores were sectioned into 1- to 2-in. long segments. These segments were sealed in glass flasks containing approximately 200 mL of native water. The mixture was then agitated to form a slurry. The radon-222 was removed by bubbling ambient air through the slurry and extracting the radon-222 into Lucas counting cells. Radium-226 was determined by the same procedure after the radon-free slurries were resealed for a minimum of 2 weeks to allow ingrowth of the daughter, radon-222. The radon-222 determined after this 2-week period represents the radon-222 concentration ( $C_{eq}$ ) in equilibrium with sedimentary radium-226. Sedimentary radon-222/radium-226 activities were calculated using C and  $C_{eq}$  (Hammond and others, 1977; Hartman and Hammond, 1984).

Radon-222 activities in both the water and sediment slurries were counted in a Lucas-type cell that was constructed of acrylic plastic. A dual counting system was used for quality-control purposes. The alpha particles emitted from radon-222 decay produce scintillations on the activated zinc sulfide coating inside the counting cell. Photons of light emitted were detected by a photomultiplier tube and counted in a cylinder in a light-free environment. Each cell was calibrated against a standard of known radon-222 activity (Roger Lee, U.S. Geological Survey, written commun., 1987). The radon counting equipment was set up in the District laboratory after the first deployment and in a location near the lake after the second deployment. Duplicate water samples were collected from the flux chambers. Duplicate samples were analyzed on both photomultiplier tubes to remove any bias in the results from using one tube over the other.

#### EXPLANATION OF TABLES

Data are presented in a tabular and figure format and are at the back of the report. The following topics are described in tables 1-19 and figures 2-5:

1. Daily flow, temperature, and specific-conductance values (tables 1, 2, and 3).
2. The extent of dye-tracer movement in the main ship channel and Prien Lake (fig. 3).
3. Salinity-profile data (fig. 4 and table 4).
4. Miscellaneous discharge, suspended-sediment and bottom-material concentrations and particle-size distribution data (table 5).

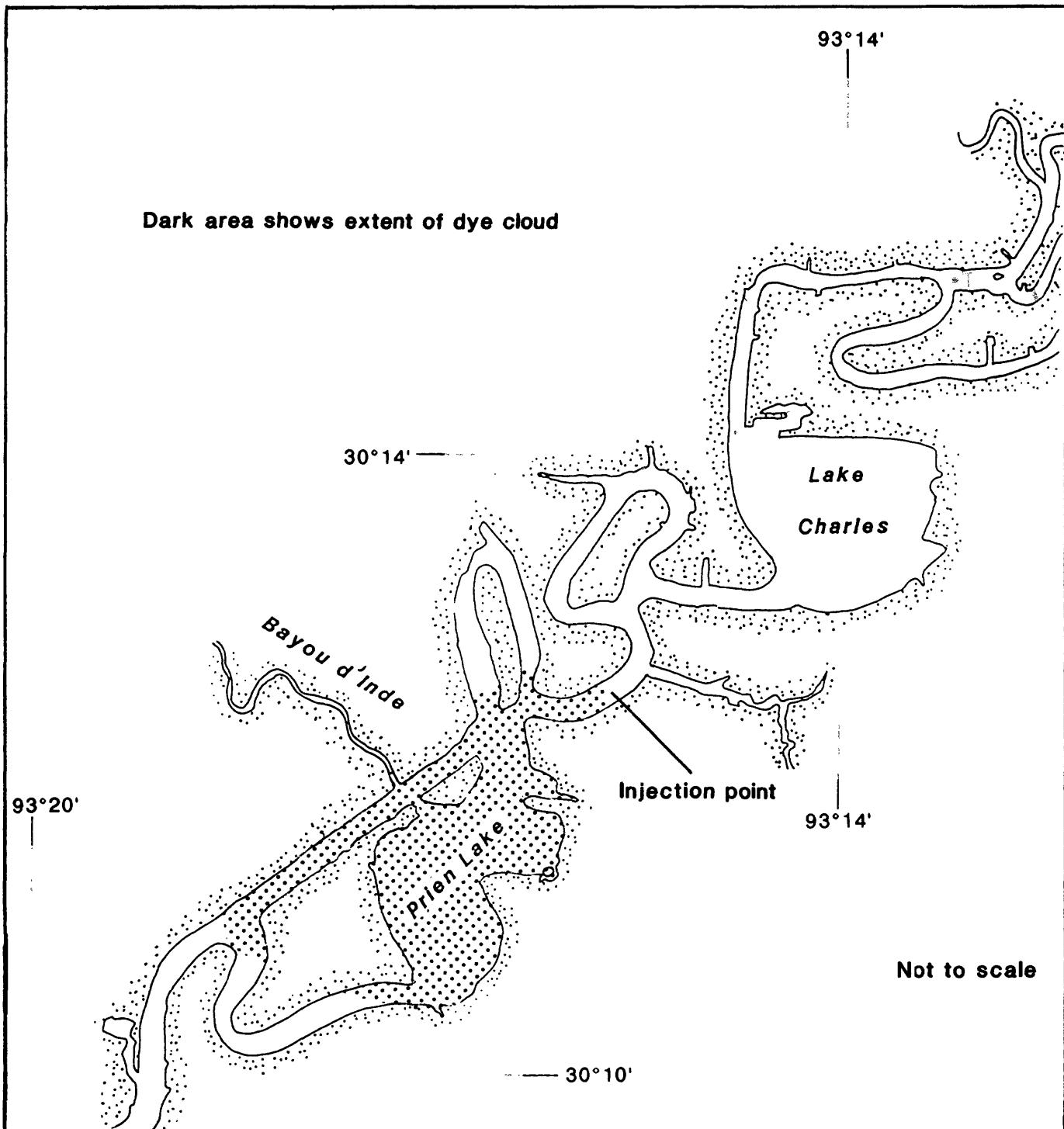


Figure 3.--Extent of dye cloud 1 day after injection into the lower Calcasieu River, Louisiana, January 13, 1987.

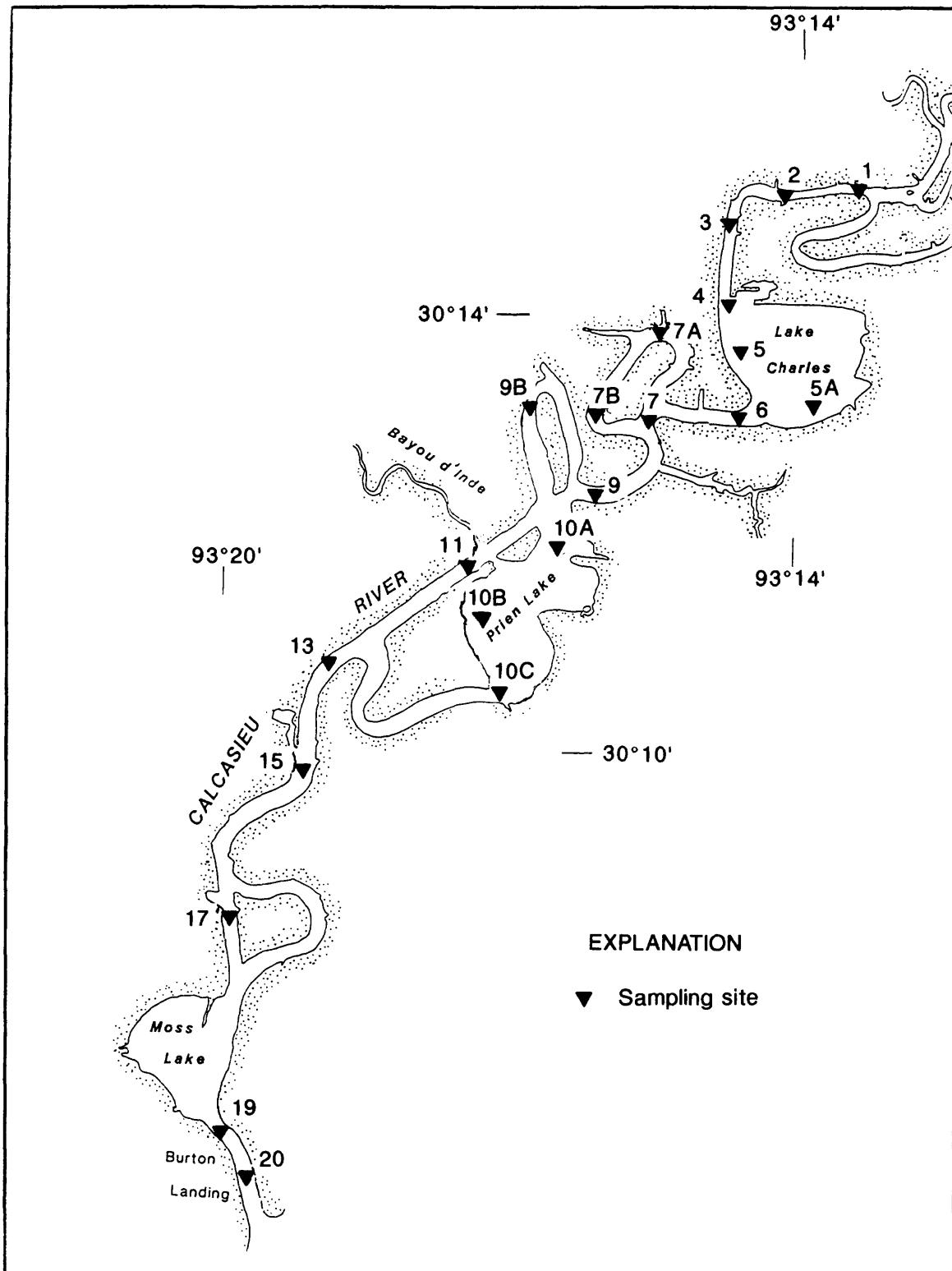


Figure 4.--Location of salinity-profile and in situ water-quality sampling sites for the lower Calcasieu River, Louisiana, February-March 1987.

5. Chemical and physical data from water and bottom material collected during reconnaissance studies (tables 6 and 7).
6. Cesium-137 and lead-210 data from core samples (table 8).
7. Chemical and physical data collected during an intensive sampling trip in May 1986 (table 9).
8. Total trace-metal concentrations (by depth) in core samples (table 10).
9. Volatile organic-compounds data collected during moderate wind conditions (table 11).
10. Chemical and physical data collected during a remobilization of synthetic organic compounds study (table 11).
11. Organic-chemical data in bottom material collected during a biodegradation study, utilizing gamma irradiation (table 13).
12. Chemical, physical, and dye-tracer data in water collected during a volatilization study (table 14).
13. Chemical and physical data in water, bottom material, and tissue collected during an uptake study using Rangia cuneata (table 15).
14. Radon-222 data in water and bottom material collected during an interstitial water migration study (table 16).
15. Concentrations of selected synthetic organic compounds in miscellaneous tissue analyses studies (table 17).
16. Chemical and physical data in water, bottom material, and tissue collected during a toxicity-characterization study (tables 18 and 19, and fig. 5).

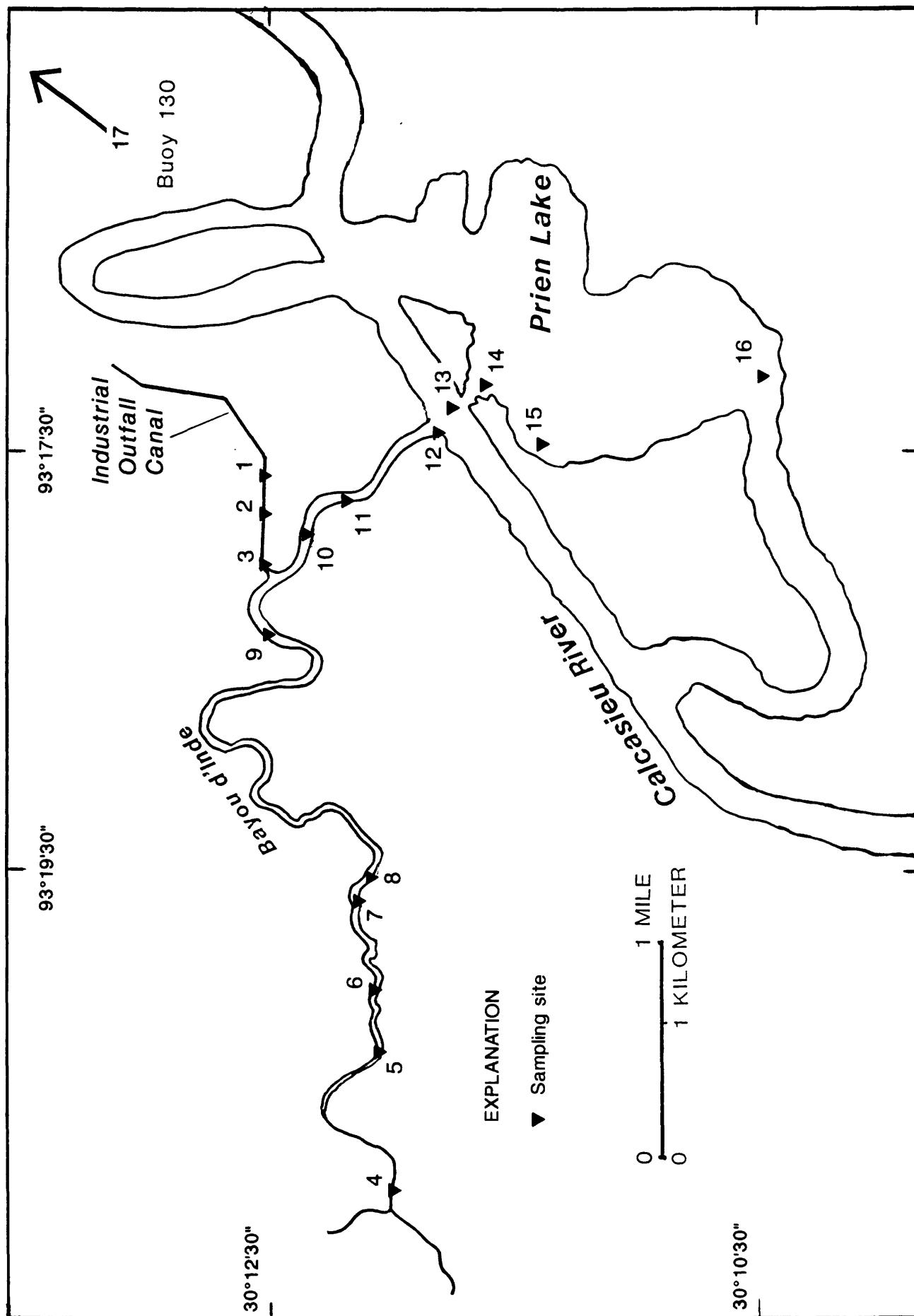


Figure 5.--Location of sampling sites during a toxicity-characterization study of the lower Calcasieu River and Bayou d'Inde, Louisiana, June 1988.

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**TABLES 1-19**

TABLE 1A.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY GAGE HEIGHT DATA, MAY 1986 TO SEPTEMBER 1988

[DASHES (---), NOT RECORDED]

DAY	GAGE HEIGHT, FEET, MAY TO SEPTEMBER 1986						AUGUST	SEPTEMBER
	MAX	MIN	MAX	MIN	MAX	MIN		
APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER			
1	---	---	6.76	5.87	6.63	5.32	5.74	4.31
2	---	---	6.63	5.59	6.63	4.96	5.69	4.21
3	---	---	6.67	5.60	6.20	4.54	5.87	4.22
4	6.63	5.74	6.85	5.59	6.35	4.51	5.94	6.69
5	6.93	5.94	7.07	5.72	6.41	4.88	6.24	6.61
6	6.83	6.08	7.11	5.95	6.55	5.00	6.24	4.37
7	7.00	5.93	6.99	5.76	6.36	4.93	---	6.33
8	6.92	5.74	7.41	5.70	6.44	4.76	6.17	4.97
9	6.82	5.71	7.67	6.52	6.60	5.00	6.37	5.42
10	6.94	5.50	7.59	6.46	---	---	6.08	6.34
11	7.07	5.47	7.30	6.31	6.58	5.40	6.10	6.32
12	6.62	5.30	6.69	5.71	6.61	5.51	6.10	5.26
13	6.44	5.15	6.78	5.38	6.46	5.54	6.17	5.99
14	6.86	5.19	6.26	5.31	6.32	5.31	6.44	5.07
15	7.15	5.64	6.54	5.42	6.21	4.98	6.38	4.87
16	7.47	6.17	6.36	5.46	6.14	4.75	6.29	4.92
17	7.57	6.18	6.30	5.33	6.17	4.59	6.11	4.82
18	6.93	5.69	6.46	5.14	6.20	4.60	---	---
19	---	---	6.56	5.14	6.19	4.46	5.88	4.01
20	---	---	6.58	5.05	5.94	4.31	5.89	4.43
21	6.78	5.53	6.68	4.89	6.01	4.33	6.21	4.54
22	7.13	5.46	6.57	5.01	6.14	4.42	6.11	4.91
23	7.40	6.00	6.79	5.00	5.97	4.53	6.31	5.46
24	7.01	5.75	6.63	5.06	6.03	4.62	5.89	5.00
25	7.08	5.57	7.32	5.43	5.90	4.81	5.82	4.84
26	6.74	5.55	9.12	6.89	6.22	4.95	5.86	4.97
27	6.75	5.37	7.01	6.21	5.84	4.90	5.89	4.60
28	6.56	5.31	6.54	5.66	5.64	4.75	6.07	4.47
29	6.48	5.07	6.30	5.67	5.68	4.53	5.84	4.54
30	6.83	5.32	6.58	5.58	5.76	4.35	6.20	4.80
31	6.68	5.83	---	---	---	4.43	6.35	5.10

## GAGE HEIGHT, FEET, OCTOBER 1986 TO SEPTEMBER 1987

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	6.65	5.37	7.37	6.17	6.60	5.17	6.71	5.69	6.51	5.76	6.75	5.65	6.48	5.65	6.48	5.65
2	---	---	6.83	5.67	6.97	5.15	6.68	5.00	6.41	5.15	6.25	5.83	6.25	5.83	6.25	5.83	6.25	5.83
3	---	---	7.01	5.64	6.42	4.67	7.34	5.68	6.03	4.96	6.22	5.48	6.22	5.48	6.22	5.48	6.22	5.48
4	7.08	6.36	7.46	6.35	6.60	5.33	5.67	3.72	6.27	5.11	6.63	5.36	6.63	5.43	6.63	5.43	6.63	5.43
5	6.90	5.87	7.46	5.32	6.63	5.33	6.32	4.97	6.36	5.36	6.63	5.36	6.63	5.43	6.63	5.43	6.63	5.43
6	6.84	5.31	6.58	5.22	6.68	5.50	6.44	5.92	6.22	5.12	6.75	5.60	6.75	5.60	6.75	5.60	6.75	5.60
7	6.43	5.31	6.94	5.81	6.76	5.84	6.41	5.46	5.50	3.80	6.99	5.90	6.99	5.90	6.99	5.90	6.99	5.90
8	6.85	5.58	7.00	5.70	6.70	5.72	6.19	4.93	5.65	4.42	6.72	5.80	6.72	5.80	6.72	5.80	6.72	5.80
9	7.23	5.75	6.79	5.26	---	---	6.53	5.71	5.83	3.94	6.41	5.17	6.41	5.17	6.41	5.17	6.41	5.17
10	6.53	5.59	6.46	5.61	5.73	4.65	6.08	4.63	6.03	4.60	6.19	4.88	6.19	4.88	6.19	4.88	6.19	4.88
11	7.03	5.35	6.73	5.40	6.26	5.05	5.50	3.95	5.94	4.69	6.03	4.75	6.03	4.75	6.03	4.75	6.03	4.75
12	6.98	5.74	6.28	5.30	5.93	4.71	5.59	4.03	5.93	4.53	6.11	4.90	6.11	4.90	6.11	4.90	6.11	4.90
13	6.65	5.70	5.29	4.03	6.22	4.53	5.91	4.42	5.80	4.46	6.22	4.80	6.22	4.80	6.22	4.80	6.22	4.80
14	6.45	5.21	6.47	4.95	6.43	5.41	6.63	4.91	6.22	5.19	6.46	5.76	6.46	5.76	6.46	5.76	6.46	5.76
15	6.53	5.55	6.69	5.31	6.75	5.51	6.71	5.10	6.93	5.92	6.63	5.75	6.63	5.75	6.63	5.75	6.63	5.75
16	6.32	5.33	6.84	5.86	6.75	5.56	6.53	5.43	5.85	4.66	7.11	5.70	7.11	5.70	7.11	5.70	7.11	5.70
17	6.50	5.46	6.78	5.51	6.54	5.37	7.02	5.91	5.66	4.78	8.29	6.70	8.29	6.70	8.29	6.70	8.29	6.70
18	6.66	5.65	6.74	5.48	6.50	5.29	7.21	6.20	5.44	4.46	7.52	6.71	7.52	6.71	7.52	6.71	7.52	6.71
19	6.51	5.36	6.63	5.25	6.44	5.24	6.24	5.24	5.03	5.87	4.58	6.15	6.15	6.15	6.15	6.15	6.15	6.15
20	---	---	6.89	5.29	6.50	5.40	6.07	5.56	6.17	5.11	7.13	5.85	7.13	5.85	7.13	5.85	7.13	5.85
21	6.87	5.86	6.60	5.37	6.50	5.46	6.61	5.69	6.10	4.56	7.17	6.03	7.17	6.03	7.17	6.03	7.17	6.03
22	7.09	6.25	6.95	5.85	6.93	6.28	6.74	5.36	6.11	4.99	7.38	5.80	7.38	5.80	7.38	5.80	7.38	5.80
23	7.28	6.59	6.92	5.71	7.64	6.13	6.46	4.84	---	---	7.41	6.48	7.41	6.48	7.41	6.48	7.41	6.48
24	7.71	5.72	7.00	6.10	6.33	5.69	6.64	5.43	6.66	5.38	7.03	5.98	7.03	5.98	7.03	5.98	7.03	5.98
25	6.53	5.22	7.74	6.41	6.45	5.78	6.40	4.98	6.56	5.32	6.96	5.23	6.96	5.23	6.96	5.23	6.96	5.23
26	6.48	5.43	6.81	5.73	6.61	5.68	6.09	4.25	7.26	6.36	6.99	5.72	6.99	5.72	6.99	5.72	6.99	5.72
27	6.53	5.49	6.60	5.96	6.76	5.62	---	---	7.31	6.45	6.89	5.83	6.89	5.83	6.89	5.83	6.89	5.83
28	6.56	5.40	6.77	5.93	6.69	5.14	6.20	4.73	7.84	6.57	6.82	5.95	6.82	5.95	6.82	5.95	6.82	5.95
29	6.44	5.40	7.07	5.88	6.78	5.39	6.28	5.00	---	---	6.62	5.28	6.62	5.28	6.62	5.28	6.62	5.28
30	6.48	5.52	7.27	5.91	6.70	5.12	6.15	4.65	4.86	4.86	5.31	3.84	5.31	3.84	5.31	3.84	5.31	3.84
31	6.73	5.77	---	---	6.66	5.19	6.24	4.86	4.86	4.86	5.60	3.36	5.60	3.36	5.60	3.36	5.60	3.36

TABLE 1A.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY GAGE HEIGHT DATA, MAY 1986 TO SEPTEMBER 1988--CONTINUED

GAGE HEIGHT, FEET, OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
			MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.14	4.25	6.07	4.39	6.75	5.47	7.12	5.78	6.00	5.21	6.34	5.05		
2	6.02	4.64	6.44	4.78	6.67	5.52	6.60	5.79	5.97	4.97	6.35	4.97		
3	5.53	3.82	6.53	5.45	6.54	5.39	6.61	5.83	6.03	4.77	6.35	4.94		
4	5.91	4.20	6.50	5.09	6.06	5.05	6.69	5.70	6.06	4.69	6.30	4.94		
5	6.13	4.56	6.17	5.00	6.14	4.95	6.47	5.62	6.17	4.57	6.70	4.93		
6	5.88	4.35	5.90	4.87	6.21	5.33	6.71	5.53	6.27	4.57	6.71	5.26		
7	5.80	4.28	5.87	4.56	6.77	5.60	6.85	5.55	6.37	4.62	6.56	5.30		
8	5.62	4.31	5.87	4.76	6.95	5.77	7.24	5.76	6.72	4.78	6.27	5.26		
9	5.65	4.33	6.12	4.98	7.20	5.89	6.95	5.74	6.65	5.03	6.26	5.18		
10	5.98	4.82	5.99	4.96	7.35	5.82	7.06	5.65	7.03	5.66	6.19	5.20		
11	6.01	5.01	6.21	4.84	7.34	5.82	7.07	5.61	6.33	5.41	6.36	5.11		
12	6.28	5.43	6.32	4.80	7.25	5.85	6.90	5.70	5.99	5.00	6.15	4.98		
13	6.90	5.47	6.27	4.93	7.19	5.73	6.70	5.50	6.07	5.11	6.27	4.65		
14	6.16	4.85	6.25	4.70	6.75	5.27	6.39	5.33	5.97	4.98	6.18	5.05		
15	5.94	4.40	6.07	4.53	6.76	5.34	6.28	5.13	6.05	4.85	6.22	5.15		
16	5.66	4.23	6.11	4.14	6.64	5.48	6.32	5.23	6.12	4.72	6.67	5.23		
17	6.26	4.22	6.41	4.47	6.79	5.60	6.34	5.33	6.08	4.52	6.62	5.23		
18	6.09	4.58	6.30	4.78	6.62	5.73	6.47	5.22	6.01	4.52	6.64	5.28		
19	6.03	4.49	6.33	4.51	6.52	5.68	6.41	5.33	5.94	4.55	6.54	4.94		
20	6.10	4.40	6.37	5.11	6.70	5.74	6.80	5.57	6.03	4.61	6.18	4.79		
21	---	6.40	5.12	6.82	5.51	6.81	5.30	5.95	4.52	6.55	5.21			
22	5.50	3.82	6.12	5.15	6.75	5.46	6.55	5.25	5.85	4.59	6.27	5.48		
23	5.52	4.20	6.22	5.12	6.73	5.36	6.83	5.28	6.17	4.46	6.44	5.14		
24	5.67	4.19	6.29	5.04	6.77	5.23	6.93	5.53	6.32	4.86	6.42	5.39		
25	5.53	4.45	6.61	5.17	6.44	5.08	6.95	5.59	6.32	5.21	6.39	5.34		
26	5.56	4.55	6.93	5.22	6.19	4.82	6.79	5.43	6.30	5.44	6.49	5.37		
27	5.62	4.30	7.28	5.68	6.25	4.63	6.47	5.30	6.15	5.32	6.68	5.53		
28	5.56	4.19	7.43	5.91	6.67	5.02	6.30	5.16	6.01	5.06	6.86	5.52		
29	5.84	3.97	7.21	6.05	6.94	5.60	6.16	5.19	6.02	5.18	6.64	4.63		
30	5.81	4.34	6.77	5.70	6.99	5.63	6.15	5.20	6.11	4.97	5.99	4.52		
31	---	---	6.68	5.39	---	---	6.00	5.25	6.28	4.92	---	---		

## GAGE HEIGHT, FEET, OCTOBER 1987 TO SEPTEMBER 1988

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.17	4.84	6.40	5.28	6.04	4.88	6.00	4.52	---	---	7.04	---
2	6.37	4.98	6.29	5.35	6.29	4.83	5.94	4.15	---	---	6.66	5.35
3	5.91	4.33	6.34	5.22	6.31	4.98	6.34	5.25	---	---	5.99	5.63
4	6.26	4.26	6.57	5.11	6.15	4.63	6.09	4.57	---	---	6.33	4.90
5	6.36	5.07	6.41	5.04	6.54	4.81	---	---	---	---	5.17	5.17
6	6.01	4.95	6.48	4.93	7.02	5.53	---	---	---	---	6.20	5.52
7	5.96	4.39	6.73	5.51	7.18	5.59	---	---	---	---	6.29	5.23
8	6.09	4.65	6.94	5.66	6.63	5.49	---	---	---	---	6.70	5.41
9	6.41	5.21	7.06	5.54	6.66	5.49	---	---	---	---	6.29	5.62
10	6.25	4.78	6.24	3.57	6.60	5.58	---	---	---	---	6.30	5.03
11	6.21	4.69	5.43	4.18	6.51	5.40	---	---	---	---	7.06	5.33
12	5.81	4.13	5.75	4.78	6.47	5.30	---	---	---	---	6.87	5.72
13	5.75	4.78	5.89	4.83	6.58	5.91	---	---	---	---	6.11	4.50
14	6.18	5.06	6.04	5.42	6.90	6.22	---	---	---	---	5.93	4.13
15	6.38	5.15	7.35	5.86	6.47	4.45	---	---	---	---	5.86	4.13
16	6.27	5.28	8.02	7.05	5.61	4.08	---	---	---	---	6.20	4.69
17	6.29	4.88	7.14	6.18	6.02	4.47	---	---	---	---	6.65	5.70
18	5.95	4.89	6.92	5.96	6.43	4.96	---	---	---	---	6.30	3.94
19	6.05	4.99	6.74	5.74	6.70	5.47	---	---	---	---	5.09	3.63
20	6.20	5.22	6.62	5.29	6.41	4.88	---	---	---	---	5.59	3.88
21	5.64	4.10	6.78	5.31	6.48	4.85	---	---	---	---	5.62	4.18
22	6.59	5.37	7.13	6.07	6.68	5.16	---	---	---	---	5.75	4.20
23	6.65	5.52	7.20	5.82	6.75	5.63	---	---	---	---	6.23	4.25
24	6.81	5.76	7.07	5.80	6.86	5.79	---	---	---	---	6.48	5.07
25	6.79	4.98	7.29	5.85	6.85	5.88	---	---	---	---	6.47	5.23
26	6.76	5.55	7.02	5.70	6.78	5.81	---	---	---	---	6.03	4.70
27	6.51	4.59	6.64	5.60	6.49	5.34	---	---	---	---	6.10	4.63
28	6.12	4.95	6.12	5.16	5.72	4.69	---	---	---	---	6.52	5.29
29	6.35	5.05	6.33	5.53	5.35	3.42	---	---	---	---	6.50	5.43
30	6.41	5.08	6.47	5.51	6.39	4.73	---	---	---	---	6.02	5.07
31	6.33	5.20	---	---	6.45	5.36	---	---	---	---	6.56	5.28

TABLE 1A.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA.  
DAILY GAGE HEIGHT DATA, MAY 1986 TO SEPTEMBER 1988--CONTINUED

DAY	GAGE HEIGHT, FEET, OCTOBER 1987 TO SEPTEMBER 1988						SEPTEMBER							
	APRIL	MAX	MIN	MAY	MAX	MIN	JUNE	MAX	MIN	JULY	MAX	MIN	AUGUST	MAX
1	6.95	5.90	6.95	5.64	6.68	5.28	---	---	---	6.29	5.29	6.39	5.51	5.51
2	6.85	5.94	7.05	5.45	6.50	4.99	---	---	---	6.27	5.26	6.65	5.69	5.69
3	6.82	5.77	---	6.43	4.95	---	---	---	---	6.14	5.16	7.02	6.03	6.03
4	7.05	6.05	6.25	5.15	6.75	4.77	---	---	---	6.25	5.02	7.32	5.74	5.74
5	6.80	5.65	6.17	4.24	6.27	5.05	---	---	---	6.10	4.78	6.71	5.69	5.69
6	6.07	5.00	6.25	4.57	6.38	5.07	---	---	---	6.19	4.55	6.73	5.59	5.59
7	6.18	4.51	6.41	4.70	6.14	5.03	---	---	---	5.98	4.23	6.65	5.56	5.56
8	6.18	4.66	6.80	5.51	6.26	5.25	---	---	---	5.53	3.77	6.69	5.60	5.60
9	6.03	4.89	6.61	5.46	---	---	---	---	---	5.57	3.75	6.78	5.63	5.63
10	5.71	4.37	6.15	4.95	---	---	---	---	---	6.76	4.29	6.66	5.92	5.92
11	4.33	3.20	6.01	4.93	---	---	---	---	---	7.04	5.44	6.60	5.81	5.81
12	---	---	6.11	5.01	---	---	---	---	---	6.50	5.58	6.67	5.85	5.85
13	5.47	3.86	6.31	4.76	---	---	---	---	---	6.50	5.47	6.67	5.79	5.79
14	5.62	4.49	6.03	4.60	---	---	---	---	---	6.61	5.76	6.75	5.58	5.58
15	5.85	4.48	5.94	4.43	---	---	6.37	5.18	6.40	5.77	7.29	6.29	5.92	5.92
16	6.13	4.53	5.93	4.45	---	---	6.21	5.08	6.02	5.26	7.74	7.01	7.01	7.01
17	6.97	4.97	5.88	4.36	---	---	5.98	4.97	6.10	5.33	7.92	6.92	6.92	6.92
18	6.66	5.41	5.78	4.25	---	---	6.20	4.92	6.24	5.40	7.73	6.19	6.19	6.19
19	5.95	4.70	6.09	4.28	---	---	6.40	5.26	6.03	4.83	7.35	5.75	5.75	5.75
20	6.33	4.46	6.15	4.56	---	---	6.35	5.49	6.13	4.69	7.04	5.39	5.39	5.39
21	6.59	5.01	6.43	4.96	---	---	5.99	4.80	6.12	4.56	6.87	5.19	5.19	5.19
22	6.47	5.42	6.64	5.36	---	---	6.05	4.68	6.09	4.58	6.67	5.20	5.20	5.20
23	6.52	5.16	5.67	5.14	---	---	5.92	4.71	6.29	4.64	6.65	5.30	5.30	5.30
24	6.09	4.77	5.81	4.77	---	---	5.97	4.42	6.17	4.54	6.63	5.45	5.45	5.45
25	6.30	5.07	5.49	4.53	---	---	5.97	4.26	6.30	4.46	6.36	5.17	5.17	5.17
26	6.06	4.64	6.10	4.79	---	---	5.98	4.23	6.44	4.73	6.35	4.95	4.95	4.95
27	5.70	4.69	6.40	5.10	---	---	6.08	4.50	6.59	4.97	6.39	4.94	4.94	4.94
28	6.41	4.97	6.59	5.14	---	---	6.34	4.35	6.54	5.22	6.37	4.96	4.96	4.96
29	7.39	5.70	6.63	5.28	---	---	6.35	4.64	6.46	5.34	6.58	5.26	5.26	5.26
30	7.23	5.85	6.82	5.33	---	---	6.34	4.82	6.28	4.93	6.86	5.39	5.39	5.39
31	---	---	6.80	5.35	---	---	6.48	5.03	6.33	5.18	---	---	---	---

TABLE 1B.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY WATER TEMPERATURE DATA, APRIL 1986 TO JULY 1988--CONTINUED

DAY	WATER TEMPERATURE, DEGREES CELSIUS, APRIL TO SEPTEMBER 1986										
	APRIL	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
1	---	23.7	22.2	28.0	25.7	29.6	27.8	32.2	30.3	30.2	28.0
2	---	22.4	21.6	26.7	25.9	28.9	28.0	32.5	30.2	29.9	28.4
3	---	21.9	20.7	27.7	26.2	29.1	28.3	32.0	30.5	30.5	29.3
4	---	21.8	20.6	28.0	26.4	30.1	28.5	31.8	30.1	30.5	29.9
5	---	22.1	21.0	28.9	26.6	30.5	28.7	31.2	30.0	30.5	30.0
6	---	23.1	21.4	28.4	26.5	30.0	29.0	30.1	28.8	30.6	30.0
7	---	24.9	22.0	27.6	26.7	30.1	28.6	---	---	30.1	28.8
8	---	25.7	23.0	26.9	25.4	29.9	29.1	31.1	29.5	30.3	29.0
9	---	25.8	23.0	25.4	24.4	30.7	28.7	31.0	29.6	---	---
10	---	25.3	24.0	25.8	25.0	---	---	30.4	29.2	---	---
11	---	26.4	23.3	25.9	25.7	29.6	28.7	29.9	28.9	30.1	28.9
12	---	25.9	23.8	26.1	27.4	30.5	28.6	31.0	28.6	30.1	29.7
13	---	26.2	24.1	27.4	26.1	31.2	28.8	31.1	28.6	30.3	29.6
14	---	27.7	25.2	---	---	30.9	29.0	31.3	29.2	30.5	29.1
15	---	27.3	25.7	---	---	31.9	29.3	31.8	29.8	30.4	29.5
16	---	26.1	25.4	---	---	32.2	29.6	30.7	29.6	30.4	29.9
17	---	26.6	25.3	---	---	31.9	29.8	30.6	29.5	30.6	29.5
18	23.0	20.5	25.4	24.0	---	31.3	29.8	---	---	30.2	29.4
19	22.0	21.4	---	---	---	31.1	29.9	31.0	29.8	29.8	28.9
20	21.3	20.5	25.0	23.8	---	31.6	29.8	31.1	30.1	29.7	28.4
21	20.8	19.8	26.9	24.1	---	30.8	29.7	30.8	29.6	29.5	28.0
22	21.0	19.8	26.2	24.6	---	31.0	29.8	30.0	28.3	29.0	28.2
23	22.6	19.7	27.0	24.5	---	31.4	29.9	30.4	28.8	29.2	27.5
24	21.5	20.5	27.7	25.3	---	30.9	29.3	30.9	29.0	29.4	28.8
25	22.4	20.8	26.8	25.3	---	30.2	29.6	30.8	29.7	---	---
26	23.9	20.8	26.3	24.9	---	30.4	29.2	32.7	30.0	29.4	28.1
27	23.6	21.5	25.5	25.0	---	31.1	29.2	30.8	29.7	29.8	28.5
28	23.2	21.2	26.2	25.3	28.2	27.3	30.5	29.6	30.2	28.9	28.3
29	25.9	22.0	27.5	25.8	28.1	27.3	31.7	29.9	30.2	28.7	29.4
30	24.4	22.7	26.5	25.2	28.4	27.5	33.0	30.4	29.3	29.7	28.2
31	---	26.9	25.1	---	---	32.4	30.3	32.4	30.4	28.5	---

TABLE 1B.-LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY WATER TEMPERATURE DATA, APRIL 1986 TO JULY 1988--CONTINUED

DAY	TOP																
	OCTOBER			NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	
1	29.7	28.5	21.8	20.6	14.8	14.3	10.1	9.8	13.0	11.6	14.6	14.1					
2	30.1	28.3	21.7	20.9	14.6	13.9	10.3	9.6	12.7	12.2	14.9	14.3					
3	--	--	21.8	21.4	13.8	13.3	10.3	9.9	13.4	12.2	14.9	14.5					
4	29.8	25.9	21.9	20.9	13.3	12.9	9.8	9.4	12.9	12.4	14.8	14.4					
5	29.9	29.1	22.0	20.8	12.8	12.5	9.8	9.4	13.7	12.7	14.9	14.5					
6	30.0	28.2	21.4	20.1	12.6	12.2	9.9	9.3	13.7	12.4	15.0	14.6					
7	28.7	27.0	21.1	20.3	12.6	12.1	10.0	9.4	13.0	12.2	15.1	14.6					
8	28.4	26.0	21.4	20.7	13.7	12.1	10.2	9.5	13.9	12.2	14.5	14.3					
9	28.0	25.4	21.3	20.5	14.5	12.8	10.6	9.8	13.7	12.2	14.9	14.2					
10	28.2	26.9	21.2	20.2	13.1	12.8	10.5	10.0	13.7	11.5	--	--					
11	28.0	26.8	22.0	19.8	13.3	12.5	10.6	9.9	14.9	12.6	14.9	14.3					
12	28.3	25.9	20.7	19.4	12.9	12.0	10.4	9.5	14.5	13.2	15.0	14.1					
13	27.4	24.6	19.8	18.2	12.6	11.6	10.3	10.0	15.2	13.6	15.2	13.7					
14	25.4	23.6	18.6	17.3	12.0	11.4	10.3	9.9	15.5	14.2	14.5	13.8					
15	24.9	23.1	18.6	16.2	12.0	11.6	10.6	10.2	15.5	14.3	15.7	14.0					
16	25.3	22.5	18.9	17.6	12.1	11.6	10.8	10.2	14.9	13.9	16.8	14.2					
17	25.0	22.6	20.0	18.6	12.3	11.6	11.3	10.6	14.8	14.5	16.8	15.4					
18	24.6	22.7	20.8	19.6	12.8	12.3	11.9	11.4	15.1	13.9	16.5	15.5					
19	24.5	23.3	20.7	19.8	12.8	12.7	11.7	10.8	13.8	13.2	17.6	16.5					
20	23.9	22.5	21.3	19.9	12.7	12.4	10.9	9.9	13.2	12.5	21.0	17.2					
21	23.6	22.0	20.0	18.9	12.4	12.0	9.9	8.8	12.8	12.1	21.1	17.8					
22	22.5	21.1	20.3	19.0	12.0	11.5	8.7	8.1	12.4	11.7	20.4	18.2					
23	22.5	21.6	20.6	19.7	11.5	10.6	8.0	7.5	11.6	11.1	19.1	18.7					
24	22.7	21.6	19.6	19.4	10.6	10.4	7.9	7.6	11.2	10.7	--	--					
25	22.7	21.7	19.3	18.4	10.7	10.4	8.3	7.9	11.0	10.8	--	--					
26	22.5	21.3	18.4	16.8	10.9	10.4	8.5	8.1	11.7	10.9	--	--					
27	22.1	20.7	16.8	15.7	10.8	10.6	--	--	13.1	11.8	19.4	17.8					
28	21.8	20.1	15.6	14.8	11.1	10.4	10.6	8.5	14.6	13.2	19.5	17.8					
29	21.6	20.3	14.8	14.3	10.9	10.1	11.9	8.8	--	--	21.9	18.1					
30	22.0	20.7	14.4	14.3	10.3	10.0	11.8	9.9	--	--	18.2	17.1					
31	21.7	--	--	--	10.2	9.9	13.0	10.6	--	--	17.2	15.9					

## TOP

## WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAY	MAX	MIN	JUNE	MAX	MIN	JULY	MAX	MIN	AUGUST	MAX	MIN	SEPTEMBER	MAX	MIN
1	17.1	16.3	26.2	21.8		26.8	25.6	27.0	25.6	24.9	31.5	28.7	28.7	31.2	30.1				
2	17.2	16.5	25.1	24.0		27.6	25.8	25.5	24.9	24.7	31.5	29.5	29.5	31.2	30.1				
3	16.4	15.4	24.2	23.2		27.7	26.2	25.5	24.7	24.7	30.9	29.5	29.5	31.3	30.0				
4	18.5	15.3	23.6	22.0		28.0	26.8	27.4	25.4	25.4	31.2	29.8	29.8	31.5	29.9				
5	17.5	15.4	23.0	22.4		28.0	26.6	28.9	26.0	26.0	31.2	30.2	30.2	31.4	29.9				
6	16.9	15.8	22.8	21.6		28.2	26.2	28.8	26.7	26.7	31.2	30.2	30.2	31.5	31.1				
7	16.9	15.6	21.7	21.3		28.2	27.1	28.2	26.6	26.6	31.8	29.9	29.9	31.5	30.8				
8	16.7	15.7	22.3	21.3		28.0	27.2	27.2	26.2	26.2	32.5	30.1	30.1	31.2	30.1				
9	19.8	15.7	23.3	21.6		27.4	26.5	26.4	25.8	25.8	32.1	29.6	29.6	30.8	30.0				
10	19.7	16.2	22.8	21.7		26.6	26.0	27.3	25.9	25.9	30.1	29.3	29.3	30.7	29.5				
11	19.2	16.6	24.2	21.9		26.0	25.5	28.9	26.0	26.0	30.3	29.0	29.0	30.5	29.1				
12	19.1	17.3	23.9	22.5		26.7	25.5	29.7	26.4	26.4	30.3	29.2	29.2	30.6	29.0				
13	20.4	18.5	24.6	22.7		26.5	25.8	27.6	26.7	26.7	30.7	29.7	29.7	30.0	28.7				
14	19.4	17.6	25.1	22.9		26.0	25.3	28.0	26.9	26.9	31.1	29.3	29.3	31.4	29.4				
15	18.7	17.1	25.5	22.6		26.8	25.5	29.0	27.1	27.1	30.5	30.0	30.0	30.8	30.0				
16	20.2	17.8	24.5	23.1		26.3	25.4	29.9	27.5	27.5	30.7	29.8	29.8	30.4	27.9				
17	20.4	18.7	25.0	23.7		25.7	25.1	30.3	28.1	28.1	31.7	29.9	29.9	30.3	27.9				
18	21.8	18.4	25.7	23.7		24.6	23.5	24.8	29.8	29.8	33.0	30.5	30.5	28.9	28.0				
19	22.4	18.5	26.2	24.6		25.5	24.8	26.2	25.2	25.2	28.2	33.9	33.9	30.6	28.7				
20	23.8	18.7	26.7	24.9		26.2	25.2	29.6	28.2	28.2	33.9	30.6	30.6	28.5	27.4				
21	21.9	19.4	26.4	24.9		27.1	25.8	29.6	28.5	28.5	33.6	30.7	30.7	29.1	27.5				
22	—	—	27.1	25.5		27.7	26.2	29.9	28.4	28.4	32.7	30.7	30.7	28.6	27.5				
23	22.3	19.7	27.5	31.0		25.7	31.0	26.8	31.6	31.6	28.5	32.7	32.7	30.8	28.5				
24	22.5	19.6	27.8	25.8		27.8	28.8	27.0	31.8	31.8	28.9	33.2	33.2	31.4	28.2				
25	22.6	19.6	27.1	26.1		28.3	27.0	31.4	29.2	29.2	32.2	31.1	31.1	27.9	26.2				
26	23.3	19.9	28.5	26.2		27.8	27.1	30.6	29.0	29.0	32.3	30.9	30.9	32.3	28.1				
27	22.7	20.3	28.2	26.9		28.5	27.2	30.2	28.5	28.5	31.3	30.9	30.9	31.3	27.7				
28	23.9	20.7	28.1	26.9		29.3	27.7	30.7	29.2	29.2	32.1	29.8	29.8	32.1	27.4				
29	25.0	21.3	27.5	26.4		29.4	27.9	31.3	29.2	29.2	31.8	30.0	30.0	27.2	26.3				
30	25.2	21.7	27.2	26.0		29.0	26.7	31.5	29.3	29.3	31.3	30.2	30.2	27.5	25.2				
31	—	—	27.4	26.3		—	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE 1B.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY WATER TEMPERATURE DATA, APRIL 1986 TO JULY 1988--CONTINUED

DAY	WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1987 TO JULY 1988						TOP								
	OCTOBER	MAX	MIN	NOVEMBER	MAX	MIN	DECEMBER	MAX	MIN	JANUARY	MAX	MIN	FEBRUARY	MAX	MIN
1	27.0	24.7	20.4	18.8	13.4	13.0	13.2	12.0	10.8	13.8	10.8	16.2	14.3	14.5	14.5
2	27.0	25.2	21.1	18.1	13.1	12.7	12.0	10.8	16.4	13.3	16.5	14.5	14.5	14.5	14.5
3	26.9	24.7	20.9	15.9	13.0	12.7	10.8	9.7	17.0	16.3	15.4	14.5	14.5	14.5	14.5
4	26.5	24.2	22.6	18.7	13.1	12.7	9.8	8.9	17.0	16.2	15.9	15.2	15.2	15.2	15.2
5	25.9	23.8	--	--	13.7	12.5	9.3	8.6	16.1	13.9	16.5	15.6	15.6	15.6	15.6
6	25.8	24.2	16.5	14.9	14.6	13.1	8.8	8.2	13.7	10.9	16.8	15.7	15.7	15.7	15.7
7	25.5	23.1	14.7	12.8	13.9	13.2	8.4	7.5	10.7	8.9	16.6	15.8	15.8	15.8	15.8
8	25.5	23.6	13.2	12.3	14.1	13.4	7.5	6.2	8.7	8.0	16.6	16.1	16.1	16.1	16.1
9	24.3	22.2	--	--	14.6	14.1	6.4	5.7	8.3	7.9	16.8	16.2	16.2	16.2	16.2
10	25.4	23.1	20.2	18.8	14.6	14.3	5.8	5.4	8.4	8.0	16.7	16.4	16.4	16.4	16.4
11	25.5	24.6	19.4	18.1	14.6	14.4	5.6	5.2	8.9	8.1	16.9	16.4	16.4	16.4	16.4
12	25.2	23.1	19.2	17.7	14.9	14.6	5.7	5.3	8.9	8.1	17.4	16.6	16.6	16.6	16.6
13	25.3	23.9	19.4	17.4	15.5	14.9	6.1	5.7	9.3	8.4	17.3	16.9	16.9	16.9	16.9
14	25.4	23.0	19.0	17.6	17.3	15.4	6.9	5.9	9.5	9.0	16.8	15.9	15.9	15.9	15.9
15	24.7	22.0	19.4	18.0	15.6	15.0	7.0	6.1	9.9	9.1	15.8	12.0	12.0	12.0	12.0
16	24.8	22.8	20.1	18.6	15.1	14.3	7.5	6.4	10.6	9.6	15.0	14.4	14.4	14.4	14.4
17	24.9	23.6	18.9	17.7	14.9	13.8	7.5	6.9	11.5	10.3	14.7	14.4	14.4	14.4	14.4
18	25.2	24.6	17.6	16.8	14.4	13.5	8.3	7.1	11.8	11.4	14.5	14.1	14.1	14.1	14.1
19	25.1	24.3	16.8	16.4	14.0	13.4	10.3	8.2	12.4	11.8	14.0	13.3	13.3	13.3	13.3
20	25.0	24.1	16.4	15.7	13.9	13.1	9.9	8.8	12.7	12.2	13.6	13.0	13.0	13.0	13.0
21	--	--	15.8	15.1	13.5	12.9	10.7	9.7	12.8	12.2	13.9	12.9	12.9	12.9	12.9
22	23.7	19.5	15.1	14.6	13.3	12.9	11.4	10.3	13.8	12.5	17.4	13.3	13.3	13.3	13.3
23	21.0	19.6	15.2	14.6	13.4	12.9	11.2	10.2	14.2	12.8	15.9	14.0	14.0	14.0	14.0
24	21.9	20.2	16.4	15.2	14.3	13.4	11.2	10.5	13.9	13.2	15.5	14.8	14.8	14.8	14.8
25	23.2	21.2	16.4	15.5	14.3	14.3	10.7	10.1	15.1	13.6	16.4	15.5	15.5	15.5	15.5
26	22.7	21.1	15.5	15.3	16.4	15.4	10.5	9.8	14.3	13.4	18.0	16.2	16.2	16.2	16.2
27	22.0	21.1	15.4	15.2	16.4	16.1	11.5	9.4	14.0	13.4	19.8	16.7	16.7	16.7	16.7
28	21.9	20.5	15.2	14.7	16.1	15.1	--	--	14.1	13.9	19.6	17.9	17.9	17.9	17.9
29	21.2	19.6	14.6	13.8	15.0	14.1	12.8	10.0	15.0	14.0	19.9	18.5	18.5	18.5	18.5
30	20.8	19.3	13.8	13.4	14.0	13.6	11.0	10.1	--	--	18.6	18.0	18.0	18.0	18.0
31	21.0	--	--	--	13.7	13.0	11.4	10.4	--	--	18.6	18.1	18.1	18.1	18.1

TOP

## WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1987 TO JULY 1988

DAY	MAX	MIN	MAX	MIN	MAY	MAX	MIN	JUNE	MAX	MIN	JULY
	APRIL			MAY			JUNE			JULY	
1	18.5	18.0	22.2	20.2	27.4	25.5	29.5	28.4			
2	18.6	18.0	22.9	20.6	27.5	25.7	30.5	28.7			
3	19.2	18.6	23.5	21.4	27.5	25.4	30.3	28.8			
4	20.2	19.3	24.0	21.7	26.0	24.3	29.9	28.8			
5	21.1	20.0	24.2	22.0	25.7	24.0	28.9	28.1			
6	20.1	19.7	24.9	22.6	26.4	24.6	28.5	27.5			
7	21.0	19.5	25.0	23.0	27.6	25.5	28.4	26.4			
8	22.2	19.3	24.3	23.1	27.5	25.7	27.3	26.2			
9	20.3	19.4	25.0	23.1	--	--	27.6	26.1			
10	20.0	19.0	24.7	23.0	27.3	25.7	27.6	26.5			
11	19.0	18.2	25.3	23.4	27.7	25.5	28.0	26.6			
12	18.5	17.8	24.6	23.1	28.5	26.4	29.3	26.8			
13	18.4	17.5	24.4	22.9	28.7	26.7	28.4	27.4			
14	19.5	17.6	25.5	23.6	27.9	26.8					
15	21.5	17.9	26.2	23.6	28.1	26.8					
16	20.9	18.6	26.9	23.7	28.5	26.7					
17	21.4	18.8	26.6	23.6	28.1	26.8					
18	21.5	20.0	26.2	23.3	28.1	26.8					
19	21.3	19.4	26.4	23.3	29.5	26.9					
20	22.2	20.1	27.8	24.1	29.7	26.8					
21	23.0	20.2	26.8	22.9	30.2	27.6					
22	23.0	21.1	24.3	22.6	30.4	28.0					
23	22.7	20.9	24.2	23.5	30.0	28.3					
24	22.1	21.0	24.8	23.5	29.0	27.0					
25	22.7	20.8	26.1	23.9	28.8	26.5					
26	24.6	21.7	26.2	24.1	28.3	27.2					
27	24.5	22.2	27.0	24.1	29.3	27.5					
28	23.3	21.3	26.6	24.8	30.0	27.8					
29	22.3	20.4	26.3	25.2	29.9	27.8					
30	20.9	19.8	26.7	25.7	30.6	28.0					
31	--	--	27.5	25.5	--						

TABLE 1B.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY WATER TEMPERATURE DATA, APRIL 1986 TO JULY 1988--CONTINUED

DAY	WATER TEMPERATURE, DEGREES CELSIUS, APRIL TO SEPTEMBER 1986											
	APRIL	MAX	MIN	SEPTEMBER								
	BOTTOM											
1	---	23.0	22.4	26.0	25.8	28.6	27.9	30.1	29.8	30.3	30.2	
2	---	23.2	22.8	25.9	25.6	28.6	28.1	30.0	29.7	30.3	30.1	
3	---	23.1	21.2	26.0	25.6	29.1	28.3	30.0	29.9	30.5	30.3	
4	---	21.7	21.0	26.3	25.8	29.1	28.3	30.2	29.9	30.4	30.2	
5	---	22.2	21.4	26.9	26.0	28.9	28.6	30.3	29.8	30.3	30.1	
6	---	22.3	21.7	27.2	26.9	28.9	28.7	30.2	29.8	30.1	30.0	
7	---	22.7	21.9	27.5	27.1	29.0	28.7	---	---	30.2	30.0	
8	---	22.7	22.1	27.5	25.7	29.1	28.7	30.2	29.8	30.2	30.1	
9	---	22.9	22.4	25.6	24.6	29.2	29.0	30.2	30.1	---	---	
10	---	23.6	22.5	26.0	25.2	---	---	30.2	30.0	---	---	
11	---	23.8	23.0	26.1	25.9	29.4	28.9	30.5	30.2	30.1	30.0	
12	---	24.2	23.7	27.7	26.7	29.5	29.2	30.4	30.1	30.1	29.9	
13	---	24.2	23.9	26.7	26.3	29.7	29.1	30.4	30.2	30.0	29.9	
14	---	24.3	23.9	27.7	26.7	30.0	29.5	30.5	30.4	30.4	29.9	
15	---	24.2	23.7	27.7	26.7	30.0	29.9	30.5	30.3	30.0	29.9	
16	---	24.4	23.9	27.7	27.1	30.0	29.9	30.5	30.3	30.4	30.3	
17	---	25.2	24.1	27.7	27.1	30.0	29.8	30.7	30.4	30.4	30.3	
18	21.2	21.1	25.0	24.0	24.0	30.1	29.8	---	---	29.9	29.8	
19	21.3	21.2	25.0	24.0	24.0	30.1	29.9	30.6	30.4	29.9	29.8	
20	21.2	21.0	25.4	24.7	24.7	30.1	30.0	30.5	30.2	30.2	29.8	
21	21.2	20.5	25.5	25.0	25.0	30.0	29.9	30.4	30.2	29.8	29.7	
22	21.4	20.7	25.4	24.7	24.7	30.0	29.9	30.3	30.2	29.7	29.6	
23	21.4	20.9	25.2	24.5	24.5	30.0	29.9	30.2	30.1	29.6	29.4	
24	21.5	21.2	25.9	25.0	25.0	30.3	29.8	30.2	30.0	29.5	29.3	
25	21.5	21.2	26.2	25.5	25.5	30.1	29.7	30.3	30.1	29.7	29.3	
26	21.7	21.5	26.2	25.5	25.5	30.1	29.7	30.3	30.1	29.7	29.3	
27	21.9	21.6	26.1	25.3	25.3	29.9	29.8	30.4	30.1	29.3	29.2	
28	22.1	21.5	26.1	25.8	25.8	27.5	30.1	30.4	30.2	29.3	29.2	
29	22.4	21.8	26.0	25.8	25.8	27.6	30.3	30.1	30.4	30.2	29.3	
30	22.6	22.2	25.9	25.7	25.7	27.7	30.4	30.2	30.4	30.3	29.2	
31	--	--	25.9	25.5	25.5	--	30.3	30.0	30.4	30.2	---	

## BOTTOM

## WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	DECEMBER	JANUARY	FEBRUARY	MIN	MAX	MIN	MAX	MIN
	OCTOBER	NOVEMBER										MARCH
1	29.2	29.1	22.1	21.8	14.7	14.2	10.2	10.0	11.0	10.6	14.6	14.0
2	29.3	29.1	22.0	22.0	14.5	13.8	10.4	9.8	12.6	10.8	14.8	14.3
3	---	---	22.0	22.0	13.7	13.1	11.6	10.1	12.3	11.1	14.9	14.5
4	29.9	25.8	22.1	21.9	13.1	12.7	10.0	9.6	12.3	11.3	14.9	14.5
5	29.8	29.7	22.1	21.7	12.6	12.3	10.0	9.6	12.2	11.2	14.9	14.5
6	29.8	29.7	22.0	21.3	12.4	12.1	10.2	9.6	12.4	11.7	15.0	14.6
7	29.7	25.7	22.1	21.0	12.3	12.0	11.3	9.6	12.4	11.7	15.1	14.7
8	29.5	29.4	21.8	21.2	13.8	12.1	10.5	9.7	12.6	12.1	14.7	14.5
9	29.4	29.3	21.4	21.1	13.9	12.8	11.4	10.0	13.0	12.4	14.9	14.3
10	29.3	28.1	22.1	21.2	13.9	12.9	10.7	10.4	22.7	11.9	---	---
11	28.5	27.5	22.1	21.3	14.3	13.0	10.5	10.1	12.1	11.8	15.1	14.5
12	28.8	27.2	21.9	21.3	13.9	12.8	11.0	10.1	12.5	11.9	14.9	14.3
13	28.2	27.2	21.5	19.9	13.8	12.2	11.5	10.4	12.4	12.1	15.1	14.3
14	28.0	26.8	21.1	20.2	14.2	12.6	11.6	10.2	12.7	12.3	15.1	14.3
15	27.1	26.8	20.9	19.9	14.2	12.9	11.7	11.2	13.5	12.3	15.0	14.2
16	26.9	25.8	20.3	19.2	13.1	11.7	11.8	10.6	14.5	13.0	15.2	14.4
17	25.9	25.1	19.9	19.3	12.3	11.7	11.4	10.9	14.4	13.9	16.5	15.0
18	25.0	24.6	19.9	19.1	12.8	12.3	11.9	11.3	14.3	13.7	16.4	15.4
19	25.0	24.1	19.7	18.8	12.9	12.7	11.6	10.7	13.9	13.5	17.2	16.5
20	24.5	23.1	19.5	18.6	12.8	12.4	10.7	9.8	14.0	12.8	18.0	17.2
21	23.7	22.7	19.2	18.1	12.4	12.1	9.8	8.7	13.6	12.5	18.7	17.7
22	22.7	22.1	18.7	18.0	12.0	11.5	8.6	8.0	13.2	11.6	19.0	18.2
23	22.6	22.2	19.2	18.4	11.7	10.6	8.0	7.4	11.9	11.1	19.0	18.5
24	22.9	22.2	19.5	18.4	10.7	10.5	7.8	7.5	12.4	10.9	18.7	18.1
25	22.8	22.4	19.4	18.4	10.9	10.5	8.2	7.8	12.3	10.7	18.4	17.7
26	22.6	22.3	18.3	16.8	11.0	10.6	8.4	8.0	11.6	10.8	19.0	18.0
27	22.2	22.1	16.7	15.6	11.0	10.8	---	---	12.9	11.6	19.0	17.8
28	22.2	22.0	15.5	14.6	10.8	10.5	10.2	8.5	14.4	13.0	18.6	17.8
29	22.2	22.0	14.6	14.1	10.6	10.2	11.4	8.8	---	---	18.9	18.1
30	22.1	22.0	14.3	14.1	10.4	10.2	11.2	10.1	---	---	18.2	17.1
31	22.0	21.9	---	---	10.3	10.1	12.0	10.6	---	---	17.4	16.5
MONTH	---	---	22.1	14.1	14.7	10.1	---	---	22.7	10.6	---	---

TABLE 1B.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY WATER TEMPERATURE DATA, APRIL 1986 TO JULY 1988--CONTINUED

DAY	WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1986 TO SEPTEMBER 1987																
	APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER	
MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	17.2	16.7	20.8	18.9	27.3	26.2	27.2	25.8	29.8	29.6	29.6	30.8	30.6	30.6	30.7	30.6	30.6
2	17.3	16.9	21.8	19.8	27.1	26.1	25.7	25.0	29.8	29.4	29.4	30.7	30.7	30.7	30.7	30.6	30.6
3	17.4	15.9	23.1	21.4	27.1	26.4	25.7	24.8	29.6	29.3	29.3	30.7	30.7	30.7	30.7	30.5	30.5
4	17.7	17.0	23.3	20.5	27.3	27.0	26.5	25.6	29.7	29.3	29.3	30.6	30.6	30.6	30.6	30.5	30.5
5	17.5	16.4	22.5	20.7	27.4	27.1	27.2	26.1	29.9	29.1	29.1	30.6	30.6	30.6	30.6	30.4	30.4
6	17.3	16.2	21.6	20.5	27.2	26.7	28.5	26.8	29.8	29.3	29.3	30.5	30.5	30.5	30.5	30.3	30.3
7	17.5	16.5	21.5	20.5	27.2	26.8	27.2	26.7	29.9	29.2	29.2	30.3	30.3	30.3	30.3	30.1	30.1
8	17.1	16.5	21.8	20.9	27.0	26.7	27.1	26.4	30.1	29.6	29.6	30.2	30.2	30.2	30.2	30.0	30.0
9	16.6	16.3	22.1	21.1	26.9	26.8	26.4	26.0	30.0	29.8	29.8	30.1	30.1	30.1	30.1	29.9	29.9
10	16.5	16.4	22.5	21.2	27.0	26.7	26.7	26.0	30.1	29.9	29.9	30.0	30.0	30.0	30.0	29.8	29.8
11	16.9	16.5	22.6	22.2	26.9	26.7	26.9	26.2	29.9	29.5	29.5	29.9	29.9	29.9	29.9	29.8	29.8
12	17.8	16.9	22.8	22.2	26.8	26.2	27.4	26.6	29.8	29.3	29.3	29.9	29.9	29.9	29.9	29.7	29.7
13	18.9	17.9	23.4	22.8	26.4	26.0	27.5	26.8	30.0	29.5	29.5	29.8	29.8	29.8	29.8	29.5	29.5
14	19.2	18.6	23.8	23.3	26.1	25.4	27.6	27.0	30.1	30.0	30.0	29.7	29.7	29.7	29.7	29.6	29.6
15	19.1	18.5	23.9	23.6	26.2	25.6	28.0	27.3	30.2	29.7	29.7	29.7	29.7	29.7	29.7	29.5	29.5
16	19.0	18.2	23.9	23.4	26.0	25.6	28.5	27.5	30.3	29.9	29.9	29.7	29.7	29.7	29.7	29.6	29.6
17	18.6	17.7	24.4	23.7	26.0	25.6	25.3	28.5	27.6	30.3	30.1	29.7	29.7	29.7	29.7	29.4	29.4
18	18.1	17.6	24.4	23.7	25.6	25.6	25.0	28.7	28.1	30.4	30.2	29.6	29.6	29.6	29.6	28.8	28.8
19	17.9	17.5	24.7	23.9	27.5	26.3	25.3	28.9	28.4	30.3	30.1	29.5	29.5	29.5	29.5	29.1	29.1
20	17.9	17.6	24.5	24.0	26.3	25.3	25.3	28.9	28.4	30.1	30.0	29.5	29.5	29.5	29.5	29.2	29.2
21	18.1	17.3	25.0	24.0	26.5	26.0	29.0	28.9	30.1	29.9	29.9	29.5	29.5	29.5	29.5	29.3	29.3
22	--	--	24.7	24.1	26.9	26.4	29.2	28.8	30.1	29.9	29.4	29.4	29.4	29.4	29.4	29.2	29.2
23	18.1	17.4	24.7	24.0	27.6	26.9	29.1	28.8	30.2	29.8	29.8	29.4	29.4	29.4	29.4	28.8	28.8
24	18.2	17.6	25.2	24.1	27.5	27.1	29.2	28.9	30.2	30.0	30.0	29.1	29.1	29.1	29.1	28.7	28.7
25	19.1	18.1	25.6	24.6	27.7	27.2	29.4	29.1	30.2	29.8	29.8	29.1	29.1	29.1	29.1	28.7	28.7
26	19.2	18.6	26.3	25.1	27.9	27.3	29.5	29.3	30.2	29.7	29.7	29.1	29.1	29.1	29.1	28.7	28.7
27	19.3	17.7	26.8	25.9	27.9	27.5	29.5	29.4	30.4	29.2	29.2	28.9	28.9	28.9	28.9	28.7	28.7
28	18.2	17.7	26.9	26.1	28.6	27.8	29.7	29.5	30.7	30.0	30.0	28.8	28.8	28.8	28.8	28.6	28.6
29	19.6	17.8	27.2	26.6	28.9	28.5	29.8	29.6	30.7	30.7	30.7	28.7	28.7	28.7	28.7	28.0	28.0
30	20.0	18.5	27.3	27.0	28.7	27.2	29.8	29.6	30.5	30.8	30.8	28.5	28.5	28.5	28.5	27.7	27.7
31	--	--	27.4	26.7	--	--	--	--	30.4	30.4	30.4	--	--	--	--	--	--

DAY	WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1987 TO JULY 1988											
	BOTTOM				JANUARY				FEBRUARY			
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	MARCH	MARCH	MARCH	MARCH	MARCH	MARCH
1	28.1	27.6	21.3	13.3	13.5	12.0	13.1	10.7	14.7	13.6	14.6	13.6
2	27.9	27.6	21.5	13.1	12.7	10.9	16.4	13.3	14.7	13.6	15.4	13.8
3	27.9	27.5	21.4	13.1	12.7	10.1	17.0	16.4	15.4	15.2	15.9	15.2
4	27.6	26.5	21.5	13.4	12.7	10.5	17.0	16.2	16.2	16.4	16.4	15.6
5	26.8	26.3	21.3	13.2	9.8	9.0	16.1	13.9	16.4	16.4	16.4	15.6
6	27.0	26.0	21.5	21.2	15.7	11.8	8.6	13.7	10.9	16.5	15.8	15.8
7	26.5	25.8	21.1	21.0	15.9	13.2	11.6	7.6	10.7	8.9	16.5	15.9
8	26.4	25.8	21.1	21.0	14.1	13.3	7.6	6.3	8.8	8.1	16.6	16.2
9	26.1	25.2	21.2	21.1	14.5	14.0	6.5	5.8	8.4	7.9	16.9	16.2
10	25.8	24.9	21.4	20.3	14.5	14.3	6.3	5.7	8.4	8.0	16.8	16.5
11	25.7	24.7	21.2	20.9	14.6	14.3	6.2	5.4	8.9	8.2	16.9	16.4
12	25.5	24.8	20.9	20.7	14.8	14.5	6.4	5.6	8.6	8.2	17.4	16.6
13	24.8	23.5	20.7	20.6	15.6	14.8	6.9	5.9	9.2	8.6	17.3	16.9
14	24.6	23.4	20.6	20.3	15.8	15.4	7.6	6.6	9.5	9.0	16.8	16.0
15	24.5	22.9	20.9	19.6	15.6	15.0	7.6	6.6	10.0	9.2	15.9	15.1
16	24.1	22.6	21.2	18.7	15.9	14.8	7.8	6.7	10.5	9.8	15.0	14.5
17	25.2	22.8	18.9	17.6	16.0	15.2	7.8	7.1	11.7	9.9	14.7	14.4
18	25.6	23.3	17.6	16.8	16.1	14.6	8.0	7.3	11.7	10.3	14.6	14.1
19	25.2	23.7	16.7	16.3	16.0	14.1	9.1	7.7	12.4	11.8	14.0	13.4
20	25.2	23.9	16.3	15.6	15.6	13.6	9.8	8.1	12.7	12.3	13.4	12.8
21	24.6	22.6	15.7	15.0	15.1	13.0	10.7	9.2	12.9	12.3	13.8	13.0
22	22.7	22.4	15.0	14.5	14.8	12.8	11.1	10.1	13.9	12.5	14.4	13.3
23	22.6	22.4	15.1	14.5	13.7	13.0	10.7	9.8	13.4	12.8	14.9	14.1
24	22.5	22.3	15.6	15.1	14.0	13.3	10.6	9.7	13.9	13.2	15.5	14.8
25	22.6	22.3	15.6	15.5	15.2	10.4	10.6	10.2	13.9	13.4	16.4	15.4
26	22.6	22.3	15.5	15.1	16.3	15.2	10.3	9.8	14.1	13.2	16.9	16.2
27	22.4	21.8	15.3	15.1	16.3	16.0	10.1	9.8	13.7	13.4	17.6	16.6
28	22.0	21.5	15.1	14.6	16.0	15.0	---	---	14.0	13.4	18.5	16.0
29	21.5	21.4	14.6	13.8	14.9	14.1	10.1	9.9	14.5	13.4	18.7	17.7
30	21.5	21.4	13.7	13.3	14.7	13.8	10.7	10.0	---	---	18.4	18.0
31	21.4	21.3	---	---	14.7	13.3	10.8	10.2	---	---	18.5	17.8
MONTH	28.1	21.3	21.5	13.3	16.3	10.4	---	---	17.0	7.9	18.7	12.8

TABLE 1B.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY WATER TEMPERATURE DATA, APRIL 1986 TO JULY 1988--CONTINUED

DAY	WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1987 TO JULY 1988						MIN
	APRIL	MAX	MIN	MAX	MIN	MAY	
BOTTOM							
1	18.4	18.1	21.1	20.4	24.9	24.5	28.6
2	18.7	18.0	21.3	20.5	24.8	24.6	28.6
3	19.3	18.7	21.7	20.9	25.2	24.7	28.1
4	20.2	19.3	21.9	21.7	25.3	24.8	28.0
5	20.3	20.0	22.3	21.7	25.3	25.1	28.0
6	20.1	19.8	22.4	21.8	25.6	25.2	28.3
7	20.2	19.6	22.5	22.1	25.5	25.3	27.7
8	19.8	19.4	22.6	22.2	25.6	25.4	28.0
9	19.8	19.4	23.2	22.4	25.6	25.4	27.6
10	19.8	19.1	23.1	22.5	26.1	25.5	28.8
11	19.1	18.7	23.4	23.0	26.1	25.7	28.2
12	18.9	18.1	23.4	23.1	25.9	25.6	27.8
13	18.9	18.0	23.4	22.9	25.9	25.5	28.5
14	19.1	18.1	23.3	22.6	25.7	25.4	27.8
15	19.5	18.3	23.3	22.3	25.6	25.4	27.0
16	19.2	18.7	23.1	22.3	25.7	25.3	26.9
17	19.3	19.1	23.0	22.3	25.7	25.2	26.9
18	19.5	19.0	22.8	22.5	25.4	25.1	27.1
19	19.4	19.2	23.5	22.6	25.7	25.5	27.1
20	19.5	19.1	23.8	22.8	26.3	25.6	27.1
21	19.7	19.2	23.2	22.3	26.7	26.0	27.0
22	20.0	19.6	23.5	22.5	27.0	26.3	27.2
23	20.2	19.9	23.7	23.4	27.2	26.6	27.4
24	20.5	19.4	23.9	23.5	27.1	26.7	27.8
25	20.1	19.5	24.5	24.0	27.3	26.7	27.8
26	20.0	19.4	24.6	24.6	27.6	27.0	28.2
27	19.9	19.5	24.7	24.5	27.8	27.2	28.1
28	20.4	19.5	24.6	24.5	28.1	27.8	28.2
29	21.0	20.0	24.6	24.5	28.4	27.8	28.4
30	21.0	20.3	24.5	24.4	28.4	27.9	28.4
31	--	--	24.6	24.4	--	--	--

TABLE 1C.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY SPECIFIC CONDUCTANCE DATA, APRIL 1986 TO JULY 1988

DAY	SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, APRIL TO AUGUST 1986						AUGUST				
	MAX	MIN	MAX	MIN	MAX	MIN					
1	---	---	5700	3600	9500	2100	2700	700	---	---	---
2	---	---	8600	3000	5200	1500	1800	600	10000	4700	---
3	---	---	7700	2100	5100	1500	1600	800	---	---	---
4	---	---	3600	1000	5600	1600	1900	800	---	---	---
5	---	---	2100	1400	5200	1700	2200	800	---	---	---
6	---	---	2200	1000	3800	1200	2400	800	---	---	---
7	---	---	2500	1000	3300	1000	2200	900	---	---	---
8	---	---	2500	1000	3200	900	3800	900	---	---	---
9	---	---	2000	1100	1900	300	4900	1300	---	---	---
10	---	---	3100	1100	300	<100	---	---	---	---	---
11	---	---	2300	1300	200	<100	4800	2300	---	---	---
12	---	---	3000	1600	100	<100	3400	2300	---	---	---
13	---	---	3700	1500	100	<100	3300	2000	---	---	---
14	---	---	3200	1800	---	---	3000	1600	---	---	---
15	---	---	3600	2300	---	---	3900	1700	---	---	---
16	---	---	4800	3000	---	---	4300	2400	---	---	---
17	---	---	---	7100	3300	---	---	5000	2100	---	---
18	---	---	---	---	---	---	---	5800	2000	---	---
19	---	---	---	---	---	---	---	6600	2300	---	---
20	---	---	---	---	---	---	---	7400	2300	---	---
21	8900	3600	---	---	---	---	6600	2400	---	---	---
22	7000	2600	---	---	---	---	8600	3000	---	---	---
23	6800	2700	---	---	---	---	9300	---	---	---	---
24	7500	2800	---	---	---	---	9100	4500	---	---	---
25	7800	2700	---	---	---	---	---	---	---	---	---
26	5900	3100	9700	4200	---	---	9000	4200	---	---	---
27	5300	3500	7000	3600	---	---	6900	1800	---	---	---
28	7700	3500	6600	3800	3700	1400	5200	3300	---	---	---
29	6100	3200	6700	3300	2900	1200	6100	4400	---	---	---
30	7200	3400	7800	3500	2500	800	8700	4700	---	---	---
31	---	---	6100	3600	---	---	---	---	---	---	---

TABLE 1C.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY SPECIFIC CONDUCTANCE DATA, APRIL 1986 TO JULY 1988--CONTINUED

DAY	SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1986 TO SEPTEMBER 1987						TOP					
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH		OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY
1	---	---	20500	10600	100	<100	400	<100	1000	600	<100	<100
2	---	---	20800	11000	100	<100	400	100	1500	900	<100	<100
3	---	---	22100	11700	<100	<100	---	300	2100	800	<100	<100
4	14600	11000	19800	14600	<100	<100	800	<100	1800	1000	<100	<100
5	14400	9000	21200	12500	<100	<100	200	<100	3900	1000	<100	<100
6	14300	8800	16900	10000	300	<100	600	100	8700	1700	<100	<100
7	17200	8900	14200	7800	1000	100	1500	400	10700	3400	<100	<100
8	17400	11700	12300	5500	1300	500	1000	300	7100	2400	<100	<100
9	25100	12900	9000	4800	1200	600	1400	300	7200	2800	100	<100
10	22000	12400	7800	4500	2900	700	1900	600	---	---	---	---
11	23300	13500	10200	4100	5700	1500	1300	500	8100	4400	300	<100
12	27100	12500	11700	4600	6100	1100	1800	500	9900	5400	700	200
13	22600	9800	11800	8500	5200	1100	1800	400	10500	5300	1700	400
14	18500	9700	12700	8900	5900	2300	3500	700	8400	2600	2300	500
15	16700	10200	15300	7100	6300	2400	3900	1400	10100	1600	1200	400
16	19300	10200	15000	8600	4300	500	3900	1400	5200	700	1400	500
17	19800	11400	15500	7700	800	100	2800	800	2700	800	2600	1000
18	19100	13200	13200	9200	400	<100	1100	<100	3200	1600	1200	100
19	20500	13200	13600	9500	100	<100	<100	<100	4400	2200	400	<100
20	22300	14000	15200	10500	100	<100	<100	<100	7400	2000	400	<100
21	23700	15700	14500	10300	<100	<100	<100	<100	9100	3400	300	<100
22	21200	15400	12600	11500	400	<100	<100	<100	8900	2800	200	<100
23	22600	17800	12900	10500	900	<100	<100	<100	4600	1100	300	<100
24	27900	17800	15300	6800	<100	<100	<100	<100	4500	1100	100	<100
25	18600	11900	6800	900	<100	<100	<100	<100	5200	1100	<100	<100
26	17900	8500	900	100	<100	<100	<100	<100	3000	200	300	<100
27	15600	8800	100	<100	<100	<100	<100	<100	---	200	<100	200
28	16600	8800	100	<100	<100	<100	<100	<100	100	<100	1400	600
29	17000	9600	100	<100	100	<100	400	<100	400	<100	---	800
30	17900	10300	<100	<100	100	<100	600	<100	600	<100	---	1100
31	18400	12100	--	--	100	<100	800	400	--	---	1900	1100

## TOP

## SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MAX	MIN	MAY	MAX	MIN	JUNE	MAX	MIN	JULY	MAX	MIN	AUGUST	MAX	MIN	SEPTEMBER	
	APRIL				MAY				JUNE				JULY				AUGUST	
1	2800	1100	16000	6700	4600	1700	3600	800	9400	3500	31300	13900						
2	3600	1500	12500	8200	3600	1300	900	200	9900	2100	27500	16200						
3	4000	2200	17100	7100	3200	1400	300	<100	15100	2200	23100	14500						
4	8200	2300	19300	7600	5300	1600	300	100	20400	3300	25400	16000						
5	10300	3700	18600	8300	4000	400	100	100	14800	4400	24300	15800						
6	12100	5700	16700	7400	9200	4000	500	100	15900	3200	24200	15900						
7	10600	5400	15400	9900	8800	4700	400	<100	15600	3200	23000	12000						
8	11100	5500	14600	8600	15800	6100	700	100	--	--	--	18900	10400					
9	9800	6500	13900	4600	11400	1000	400	<100	12600	3500	19500	13500						
10	8200	5200	10800	4100	16800	8300	700	100	17400	3800	20200	10600						
11	7000	4500	9200	3600	12400	6400	600	200	9100	1700	18400	6700						
12	5000	2200	10200	4700	11600	1000	800	300	6100	1200	16900	5700						
13	7100	2100	11400	5500	8500	3200	1300	300	8800	600	15100	7100						
14	7600	3400	10300	5300	6700	2100	600	300	5300	700	15700	2400						
15	5500	3100	10600	3700	2200	700	600	300	5300	200	16800	9300						
16	4900	2500	8600	2400	---	---	700	400	5800	300	19200	9400						
17	13600	2500	8400	2100	800	300	1900	500	8100	400	17700	8500						
18	8100	3200	6500	2100	600	300	1200	600	3400	1700	12900	4200						
19	7300	2000	5500	2100	300	<100	1800	800	5100	2100	7900	2800						
20	7000	1900	5300	2200	300	200	3200	1000	5900	2500	6700	2800						
21	7500	3400	4700	2100	700	200	6900	1700	6900	2600	11100	3400						
22	---	---	4500	1700	600	200	6400	2300	8800	2600	14100	5800						
23	10900	5500	5000	1800	400	300	18300	2400	9000	3700	16600	9000						
24	12600	6100	5500	2100	500	300	7700	2400	10500	4100	16400	10600						
25	19000	7200	5800	2000	700	200	16800	3000	12000	5000	15100	10400						
26	18100	7700	5600	2000	2100	400	20400	3000	11000	5800	17900	10400						
27	25100	7000	5600	3000	1200	500	12200	2900	14700	6800	16300	8800						
28	17200	8200	7300	4000	3000	700	13200	3600	10800	7600	21900	11200						
29	14700	8700	9300	3600	6400	1000	15600	4200	11800	7600	21800	11800						
30	16500	8400	6600	2600	9000	1900	4100	15700	7700	22400	10900	10900						
31	---	---	5200	2100	---	---	16100	3600	17300	11200	---	---	---					

TABLE 1C.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY SPECIFIC CONDUCTANCE DATA, APRIL 1986 TO JULY 1988--CONTINUED

DAY	SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1987 TO JULY 1988						TOP					
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH						
1	23700	14200	12900	7100	300	<100	5300	1700	7400	2200	3000	1700
2	21500	15800	15700	8900	500	200	3800	1300	--	800	2800	1500
3	22100	15700	15700	10900	1500	300	3600	1100	900	700	4100	1200
4	24900	15400	17800	10000	2100	300	3500	1100	700	700	1600	900
5	23500	17700	21400	12000	1800	200	3800	1200	700	700	1100	900
6	24800	15700	19100	11500	1700	700	4800	1600	700	700	1400	900
7	23800	15500	19000	12300	4300	700	5800	1900	700	700	1600	1000
8	25600	18100	20800	12300	1200	200	2700	1300	700	700	1500	900
9	22400	17900	--	--	1300	300	4500	2400	900	700	2000	700
10	26100	16900	17100	8000	1400	300	5600	2100	1200	700	<100	<100
11	26600	18700	18400	10900	1200	400	6200	3900	1500	900	<100	<100
12	28300	17700	18600	10900	1000	400	6600	3900	1200	900	<100	<100
13	29700	22500	16700	10500	1500	300	7700	4300	2600	1000	<100	<100
14	29400	22600	14900	8300	1600	800	9100	6500	2100	1000	<100	<100
15	28000	22300	12500	8500	1700	500	9400	5600	3200	1000	<100	<100
16	30300	24300	12800	3000	2700	700	8400	5200	2800	1100	<100	<100
17	26900	24800	3500	200	7000	2700	8400	4900	2200	900	700	<100
18	27600	22700	200	<100	8100	4100	8500	4500	4100	1400	1200	<100
19	26700	20400	100	<100	7000	3000	6400	4400	1900	700	<100	<100
20	30600	20400	100	<100	8000	2400	7300	4600	900	700	<100	<100
21	--	--	<100	<100	6700	2000	6700	3900	900	700	700	<100
22	28000	18100	<100	<100	5200	1300	6300	3900	1100	700	1000	700
23	25900	19900	<100	<100	4400	1100	6100	3800	1100	700	800	700
24	27500	19700	<100	<100	3400	900	6400	3800	800	700	900	700
25	26700	14700	200	<100	2400	800	6700	4400	1600	700	1400	800
26	26900	11600	<100	<100	1500	500	7300	2900	2500	800	1100	900
27	15000	7900	<100	<100	900	400	8500	4700	2500	1200	1900	900
28	11100	8000	<100	<100	1000	500	--	--	2100	1000	1600	1100
29	12700	8300	<100	<100	1100	800	7300	2800	2300	1000	1600	1300
30	12000	7400	200	<100	3000	1000	6700	2200	--	--	2000	1100
31	11000	7100	--	--	4400	2200	6000	2600	--	--	1700	1000

## TOP

## SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1987 TO JULY 1988

DAY	APRIL			MAY			JUNE			MAX			MIN		
	MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN	MAX	MAX	MIN	
1	1400	900	13900	6200	21000	12800	13200	8100							
2	1600	700	11600	4700	19900	11100	12300	8100							
3	900	700	13000	6100	22700	10200	12800	6100							
4	800	700	9100	3400	15600	8400	12300	7200							
5	900	700	9800	3800	10900	6200	16900	8100							
6	800	700	9400	4100	8500	6000	17800	9000							
7	800	700	7000	4400	10900	7200	16000	6300							
8	800	700	8700	5700	11400	9700	15200	6900							
9	800	700	8400	5500	---	---	---	19100							
10	1000	700	8500	4300	14500	6700	13400	5800							
11	1500	1100	7800	4900	14200	7000	9600	4400							
12	4800	1100	8700	4800	16800	8500	7900	5500							
13	2700	1300	9000	5900	19200	8900	6700	3300							
14	4600	1700	11100	5100	25200	10600									
15	4300	1600	10200	5000	22500	14800									
16	4700	1900	11100	4700	22800	14500									
17	2900	1900	12100	5300	20600	15200									
18	5000	2700	12200	5500	20600	14000									
19	4200	2600	13800	6700	20000	14200									
20	5600	3600	13200	7800	22000	13600									
21	4800	3100	10300	4300	26700	13800									
22	4400	3500	7500	3600	26100	14800									
23	4100	3200	4900	2400	24000	13900									
24	4700	2600	4300	2300	32100	16100									
25	7800	2900	4500	3000	27500	12300									
26	8100	4600	8600	3600	20500	7900									
27	8200	5000	9900	5500	15900	8300									
28	9900	6200	12800	4700	15700	8700									
29	23300	6600	13600	4900	13700	7800									
30	16800	7200	13400	6300	13000	7600									
31	---	---	17600	7700	---	---									

TABLE 1C.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY SPECIFIC CONDUCTANCE DATA, APRIL 1986 TO JULY 1988--CONTINUED

DAY	SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, APRIL TO SEPTEMBER 1986						BOTTOM					
	APRIL	MAX	MIN	MAX	MIN	MAY	MAX	MIN	MAY	MAX	MIN	MAY
1	---	23100	18000	26400	19400	6000	30600	27300	34700	33200	33300	33300
2	---	22200	20000	25400	20000	4400	400	31500	28300	34800	34800	33300
3	---	21900	4000	26000	20900	3200	900	34600	30100	34000	33000	33000
4	---	9700	1800	26200	18700	5100	700	37900	33400	34100	31900	31900
5	---	17100	1900	24200	11300	7300	1600	39200	37100	33300	32200	32200
6	---	10400	2200	18700	11500	13100	1800	39100	35600	32800	31100	31100
7	---	8800	1900	17100	8100	15900	2100	---	---	32600	31000	31000
8	---	13000	3000	13900	2700	20400	8500	35200	30100	31900	30700	30700
9	---	15700	6900	2400	<100	25600	16800	35400	28200	---	---	---
10	---	13700	6800	100	<100	---	---	32100	25900	---	---	---
11	---	13800	6100	<100	<100	23700	15400	30800	25500	31100	28400	28400
12	---	13800	8700	---	---	16300	11000	33200	23700	31000	21500	21500
13	---	15800	10000	100	<100	13500	8300	34800	30200	31000	21800	21800
14	---	17800	14100	---	---	12700	9200	36700	33500	31400	22100	22100
15	---	18600	14400	---	---	13200	10600	36400	29800	31300	22300	22300
16	---	---	17600	13500	---	---	13400	10500	34200	25600	31700	22500
17	---	---	18600	12900	---	---	13800	11400	31200	27000	31700	22800
18	28600	26200	19400	12400	---	---	15800	13100	---	---	31700	23300
19	29300	26200	---	---	---	---	18900	14100	27800	24100	31800	23400
20	29200	17000	25200	20200	---	---	19600	16200	31000	26400	32500	23800
21	25300	9600	29100	22900	---	---	21400	18600	32200	29300	32400	24100
22	25900	7700	29200	23300	---	---	24100	20500	32400	31300	32800	24400
23	28500	12700	27000	20600	---	---	25600	22100	33400	31200	33000	31400
24	29600	20200	24200	20000	---	---	28500	24400	32300	31100	33200	30600
25	26700	20400	23600	18400	---	---	28100	24900	31600	30600	---	---
26	26200	20500	21400	13000	---	---	28600	19800	31700	30300	31500	27600
27	26100	20600	20100	---	---	---	25900	20900	31600	28600	30800	28400
28	25000	14300	21100	12500	---	---	24900	21000	31400	28300	31100	27600
29	24900	16100	22600	17900	8900	1800	24000	22000	32600	30700	30800	27500
30	23300	11700	23200	19600	7900	1300	25600	23600	33400	32000	29500	25200
31	---	---	25800	10900	---	---	28700	25100	34200	33200	---	---

## BOTTOM

## SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1986 TO SEPTEMBER 1987

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	
1	29000	22900	34800	28100	700	600	1400	200	19200	6900	<100	<100	1900	6900	<100	<100		
2	29000	22500	34900	29500	700	600	4100	300	17100	1300	<100	<100	14700	4700	<100	<100		
3	---	---	34800	29900	600	600	14000	1000	19100	5500	<100	<100	1000	15700	<100	<100		
4	28000	23000	35400	31000	600	600	1000	100	24500	15700	<100	<100	1000	1000	<100	<100		
5	28300	23000	35700	19900	600	500	600	100	24500	15700	<100	<100	1000	1000	<100	<100		
6	28400	24700	25600	18000	1000	500	5100	900	25100	13300	<100	<100	1000	1000	<100	<100		
7	29400	20700	28400	15600	3700	700	14400	900	26500	16200	<100	<100	1000	1000	<100	<100		
8	30700	28600	27100	12000	15800	900	7100	1000	25400	11800	100	100	1000	1000	<100	<100		
9	31200	30100	18400	10200	15400	1200	---	1600	24200	10800	600	<100	1000	1000	<100	<100		
10	32400	31000	23200	10800	11900	1300	5600	1700	---	---	---	---	---	---	---	---		
11	33400	32200	27000	16100	17600	3300	4400	1200	26500	17600	1800	1800	200	200	200	200		
12	34200	32300	26700	17000	12900	4500	15400	1600	25700	14100	10700	10700	300	300	300	300		
13	34600	31600	23600	14800	16400	5300	20800	4800	26600	23600	16700	16700	4700	4700	4700	4700		
14	35200	31900	26200	23800	20600	8300	23500	5000	27700	20400	18500	18500	4100	4100	4100	4100		
15	35000	33500	27000	23600	21700	12000	24200	---	26300	14400	17100	17100	1400	1400	1400	1400		
16	34900	29000	28300	23100	14800	800	23700	3400	23100	1300	14500	14500	1200	1200	1200	1200		
17	34600	29100	27600	20500	1100	200	19500	1400	11200	2000	14400	14400	1300	1300	1300	1300		
18	32300	23600	25800	17500	600	100	3700	<100	19800	2900	2000	2000	100	100	100	100		
19	33500	28300	24700	17800	400	<100	100	<100	25500	4100	200	200	<100	<100	<100	<100		
20	37200	25600	24900	17700	300	<100	100	<100	26500	10000	300	300	<100	<100	<100	<100		
21	37700	33400	26000	19900	200	<100	<100	<100	26100	9300	200	<100	200	200	<100	<100		
22	37700	35400	26500	20200	900	<100	<100	<100	20100	5800	900	900	<100	<100	<100	<100		
23	37900	35200	25000	18100	1600	<100	<100	<100	12600	3200	500	500	<100	<100	<100	<100		
24	37500	25600	24500	7600	<100	<100	<100	<100	23900	3400	200	200	<100	<100	<100	<100		
25	33300	19600	11800	1700	<100	<100	<100	<100	24200	2600	100	100	<100	<100	<100	<100		
26	31900	25400	1600	800	<100	<100	<100	<100	11600	300	300	300	<100	<100	<100	<100		
27	33000	31200	900	700	<100	<100	<100	<100	200	<100	200	200	200	200	200	200		
28	34300	31800	800	600	<100	<100	100	100	100	100	<100	<100	<100	<100	<100	<100		
29	34200	30700	700	600	100	<100	1200	<100	1200	<100	<100	<100	<100	<100	<100	<100		
30	34400	29700	700	200	<100	900	100	100	100	11900	500	<100	<100	<100	<100	<100		
31	34600	31900	---	---	---	---	---	---	---	---	---	---	---	---	---	---		

TABLE 1C.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY SPECIFIC CONDUCTANCE DATA, APRIL 1986 TO JULY 1988--CONTINUED

DAY	SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1986 TO SEPTEMBER 1987																	
	APRIL	MAX	MIN	MAX	MIN	MAY	MAX	MIN	JUNE	MAX	MIN	JULY	MAX	MIN	AUGUST	MAX	MIN	SEPTEMBER
1	11700	4400	31600	29000	19500	10400	3800	900	21400	18400	35000	33600	35000	33600	35000	33600	35000	33600
2	15200	8700	30000	27700	16400	6600	900	<100	21700	19700	35400	34700	35400	34700	35400	34700	35400	34700
3	17500	4300	29200	25400	18000	7100	100	<100	22600	18400	35800	34600	35800	34600	35800	34600	35800	34600
4	23900	18600	30200	24300	17600	13200	100	<100	23100	17400	35600	33800	35600	33800	35600	33800	35600	33800
5	25700	22200	32500	28300	19500	16800	100	<100	25100	16000	35600	34000	35600	34000	35600	34000	35600	34000
6	26200	23800	32000	25300	22200	18400	300	<100	26500	20700	35500	34000	35500	34000	35500	34000	35500	34000
7	25800	21600	31200	27400	24700	21000	300	<100	27700	21800	35400	33200	35400	33200	35400	33200	35400	33200
8	26000	23000	31000	27900	26600	23100	1900	<100	30300	18400	34700	32600	34700	32600	34700	32600	34700	32600
9	26400	21200	30600	27600	29100	21000	500	<100	30400	25800	33500	31300	33500	31300	33500	31300	33500	31300
10	23500	18500	31200	15400	29600	25700	1300	<100	31700	18200	33500	29000	33500	29000	33500	29000	33500	29000
11	18200	11600	30800	24500	28400	25500	1300	<100	27900	17100	32700	28600	32700	28600	32700	28600	32700	28600
12	15300	10800	30000	22000	26300	18400	1100	600	20100	8400	31300	27100	31300	27100	31300	27100	31300	27100
13	15300	12500	28600	24000	21200	11800	1800	800	20400	7600	31000	27200	31000	27200	31000	27200	31000	27200
14	13700	9800	26800	22500	12600	3200	1100	400	17500	---	31500	28800	31500	28800	31500	28800	31500	28800
15	15300	9100	26100	19000	4900	2500	800	200	---	---	31700	28800	31700	28800	31700	28800	31700	28800
16	18100	10100	23900	17100	1400	300	1400	200	19000	7700	32300	28600	32300	28600	32300	28600	32300	28600
17	22400	15700	23900	15400	10700	600	<100	10900	800	19800	12400	31100	26700	31100	26700	31100	26700	31100
18	24600	20500	22200	20500	23500	12200	100	<100	8100	1100	20600	17000	30500	20300	30500	20300	30500	20300
19	25700	22100	22800	25500	12200	100	<100	19300	14000	25400	19500	30300	24800	30300	24800	30300	24800	
20	25700	22800	25500	12200	100	<100	19300	14000	28400	24400	30900	26000	30900	26000	30900	26000	30900	
21	25800	20800	26500	26500	16300	100	<100	20500	18500	30400	25100	32800	30600	32800	30600	32800	30600	
22	--	--	27600	27600	16300	100	<100	22000	16600	30700	28100	34100	32000	34100	32000	34100	32000	
23	28700	23700	29200	24700	100	<100	21300	17600	32300	27800	35400	33300	35400	33300	35400	33300		
24	30200	26400	28800	22200	1200	100	21400	18000	32800	29000	35300	34200	35300	34200	35300	34200		
25	33200	29500	27700	20800	1200	200	22200	16900	33100	29400	35300	33900	35300	33900	35300	33900		
26	33700	31700	27500	20100	2200	500	22200	16500	32600	30100	35000	33600	35000	33600	35000	33600		
27	34400	30500	25400	19700	13200	400	19900	14800	30600	27300	35000	33400	35000	33400	35000	33400		
28	32000	30300	24300	18700	24800	11000	18600	14700	28900	27500	34800	33900	34800	33900	34800	33900		
29	31900	28700	18400	28700	23800	74000	19500	15200	30600	28700	34900	30200	34900	30200	34900	30200		
30	31600	29000	23300	15700	27100	15700	100	20200	16400	33700	30300	35300	32900	35300	32900			
31	--	--	--	22900	13200	--	--	20200	16400	33700	31700	--	--	--	--	--		

## BOTTOM

DAY	SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1987 TO JULY 1988											
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	35300	33600	29600	27000	600	200	11700	1800	22800	2300	18000	2900
2	35600	32700	30700	28800	1300	400	---	2000	2200	400	20400	6700
3	35800	33900	31800	29800	4500	600	16600	1800	500	300	16400	1100
4	35600	34300	31800	28900	5100	600	13400	1300	400	300	1500	600
5	35600	34200	31800	29700	23700	1600	---	2400	400	300	3900	600
6	35400	33500	32000	29800	26600	18300	30500	3600	400	300	2100	1000
7	34800	33300	32700	31500	27300	1000	31300	1900	400	300	1500	800
8	34600	33000	33300	32100	2400	400	2800	1200	600	300	1300	600
9	34600	31900	31900	33600	30400	2200	600	3000	1300	400	2200	300
10	34000	31900	32800	19000	2200	600	6200	2000	1500	600	<100	<100
11	33800	31900	33500	30300	2000	700	8500	3000	1800	600	<100	<100
12	34500	32600	34500	32800	3800	700	11300	3100	2900	800	<100	<100
13	34200	33300	35200	33500	19000	800	12100	2700	3700	1600	<100	<100
14	34400	33800	35400	34400	19500	1200	19400	6900	12500	1100	<100	<100
15	34900	34100	35800	32500	5500	900	19300	5800	13700	1400	<100	<100
16	35200	34500	34300	4300	18200	3600	24000	6100	6500	1300	<100	<100
17	35000	34100	4600	300	20800	9000	23900	6000	16400	1800	600	300
18	35100	34400	400	100	28900	10400	25100	3700	21400	2100	500	<100
19	35100	34500	200	100	29900	11100	24600	5100	3200	500	400	<100
20	34900	34200	200	<100	26700	8000	16300	2800	700	400	500	<100
21	34800	33400	100	<100	26100	3500	8700	2600	900	500	400	<100
22	34100	32800	100	<100	25300	2300	11700	2400	900	500	500	<100
23	34100	33100	100	<100	15800	1500	12000	3400	10000	400	400	300
24	34500	33200	100	<100	12800	1200	15300	4700	600	400	700	400
25	34900	33300	400	<100	2900	800	8300	3300	4400	600	1300	500
26	35000	31300	100	<100	2300	500	7200	3600	9100	1700	1800	700
27	34200	13100	400	<100	1700	500	20000	4500	5800	1600	5700	1100
28	30000	25300	600	<100	2000	500	---	---	9900	2000	10900	1300
29	31700	28400	400	<100	1400	700	24000	7200	14100	1900	6200	1200
30	31200	27000	600	100	20000	1800	22700	6900	---	---	2900	1200
31	29800	26600	--	--	23300	4400	22000	7900	---	---	2100	800

TABLE 1C.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY SPECIFIC CONDUCTANCE DATA, APRIL 1986 TO JULY 1988--CONTINUED

	SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1987 TO JULY 1988					
DAY	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE	
1	1500	700	34200	31700	37000	33300
2	1800	300	34900	31800	36500	33600
3	400	300	32800	24700	36500	30500
4	400	300	26200	20400	36400	29600
5	400	300	25500	20300	36000	28600
6	300	300	26900	17300	36300	31100
7	300	300	28300	24100	36000	33100
8	300	300	26400	22700	35500	32200
9	400	300	23600	20100	---	38200
10	1100	400	24200	20900	32400	26100
11	2500	800	24200	21900	32400	29900
12	5800	1600	24400	21800	34500	32000
13	16300	2900	24800	22800	37300	33900
14	24100	6500	25700	23500	38300	35200
15	28500	8800	26000	22800	38800	36600
16	28600	16000	27100	24200	39700	36200
17	33100	23200	29200	24200	40200	35400
18	23400	9700	29500	25800	37900	35600
19	21400	8000	31600	24900	38300	38600
20	29700	17600	32500	29000	37900	35600
21	27900	19700	31700	18600	37600	35600
22	21900	15700	25700	9800	38100	36600
23	21600	13800	11000	3900	38200	35800
24	27700	---	10700	5600	38200	37100
25	28500	22700	21300	6800	38900	35600
26	29700	24900	30700	21400	37100	30200
27	29900	26900	35300	29800	36000	31400
28	33100	29300	35500	32500	33900	29100
29	34000	31100	38000	33500	32200	29200
30	33900	31300	38100	33300	32300	28300
31	---	---	36800	34300	---	---

TABLE 1D.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY VELOCITY DATA, OCTOBER 1986 TO JULY 1988

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.2 OF TOTAL DEPTH (7 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988					
<b>1986</b>					<b>1986</b>
10-01	MAX 0.43	10-17 MAX 0.27	11-01 MAX 1.12	11-17 MAX 1.01	
	MIN -1.15	MIN -0.83	MIN -0.09	MIN -0.20	
10-02	MAX 0.32	10-18 MAX 0.27	11-02 MAX 1.01	11-18 MAX 1.15	
	MIN -1.10	MIN -1.05	MIN -0.25	MIN -0.36	
10-03	MAX 0.43	10-19 MAX 0.16	11-03 MAX 1.20	11-19 MAX 0.76	
	MIN -0.91	MIN -0.85	MIN -0.06	MIN -0.33	
10-04	MAX 0.52	10-20 MAX 2.41	11-04 MAX 0.98	11-20 MAX 1.01	
	MIN -0.91	MIN -0.61	MIN -0.41	MIN -0.36	
10-05	MAX 0.30	10-21 MAX 0.76	11-05 MAX 1.04	11-21 MAX 0.90	
	MIN -1.02	MIN -0.50	MIN -0.28	MIN -0.36	
10-06	MAX 0.24	10-22 MAX 0.68	11-06 MAX 0.76	11-22 MAX 1.09	
	MIN -1.18	MIN -0.41	MIN -0.69	MIN -0.33	
10-07	MAX 0.35	10-23 MAX 0.98	11-07 MAX 0.60	11-23 MAX 1.01	
	MIN -0.91	MIN -0.17	MIN -0.52	MIN -0.33	
10-08	MAX 0.13	10-24 MAX 0.96	11-08 MAX 0.74	11-24 MAX 2.52	
	MIN -0.80	MIN -0.22	MIN -0.69	MIN -0.20	
10-09	MAX 0.27	10-25 MAX 0.93	11-09 MAX 0.63	11-25 MAX 3.56	
	MIN -0.69	MIN -0.69	MIN -0.72	MIN -1.65	
10-10	MAX 0.22	10-26 MAX 0.54	11-10 MAX 0.49	11-26 MAX 4.62	
	MIN -0.83	MIN -0.72	MIN -0.61	MIN 2.21	
10-11	MAX 0.05	10-27 MAX 0.63	11-11 MAX 0.85	11-27 MAX 4.16	
	MIN -0.94	MIN -0.36	MIN -0.94	MIN 2.27	
10-12	MAX 0.49	10-28 MAX 0.79	11-12 MAX 0.82	11-28 MAX 4.49	
	MIN -0.83	MIN -0.28	MIN -0.61	MIN 2.43	
10-13	MAX 0.35	10-29 MAX 0.74	11-13 MAX 0.54	11-29 MAX 4.19	
	MIN -0.83	MIN -0.14	MIN -0.55	MIN 1.69	
10-14	MAX 0.35	10-30 MAX 0.82	11-14 MAX 0.68	11-30 MAX 3.91	
	MIN -0.91	MIN -0.36	MIN -0.36	MIN 1.31	
10-15	MAX 0.13	10-31 MAX 1.06	11-15 MAX 0.95		
	MIN -0.66	MIN -0.31	MIN -0.06		
10-16	MAX 0.24				
	MIN -1.18				
			MIN -0.03		

TABLE 1D.-LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY VELOCITY DATA, OCTOBER 1986 TO JULY 1988--CONTINUED

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.2 OF TOTAL  
DEPTH (7 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988

	1986	1986	1986	1987	1987	1987						
	12-01	MAX MIN	3.77 1.47	12-17	MAX MIN	2.93 0.11	01-01	MAX MIN	2.19 -0.61	01-17	MAX MIN	1.34 -0.22
12-02	MAX MIN	3.91 1.72		12-18	MAX MIN	3.01 0.74	01-02	MAX MIN	1.50 -0.72	01-18	MAX MIN	4.43 0.93
12-03	MAX MIN	3.53 1.20		12-19	MAX MIN	3.28 0.93	01-03	MAX MIN	2.11 -0.50	01-19	MAX MIN	5.12 3.45
12-04	MAX MIN	3.31 1.01		12-20	MAX MIN	3.23 0.93	01-04	MAX MIN	2.68 0.60	01-20	MAX MIN	5.09 3.72
12-05	MAX MIN	3.09 0.10		12-21	MAX MIN	2.82 0.65	01-05	MAX MIN	1.67 -0.50	01-21	MAX MIN	5.12 3.42
12-06	MAX MIN	2.29 -0.09		12-22	MAX MIN	2.93 0.24	01-06	MAX MIN	0.38 -0.47	01-22	MAX MIN	5.12 3.45
12-07	MAX MIN	1.58 -0.72		12-23	MAX MIN	3.64 -0.25	01-07	MAX MIN	1.17 -0.44	01-23	MAX MIN	5.12 3.39
12-08	MAX MIN	0.90 -1.27		12-24	MAX MIN	3.86 2.16	01-08	MAX MIN	1.23 -0.72	01-24	MAX MIN	5.04 2.35
12-09	MAX MIN	0.82 -0.50		12-25	MAX MIN	3.23 1.94	01-09	MAX MIN	0.82 -0.63	01-25	MAX MIN	4.38 2.38
12-10	MAX MIN	1.15 -0.80		12-26	MAX MIN	3.39 1.48	01-10	MAX MIN	1.23 -0.91	01-26	MAX MIN	3.56 0.96
12-11	MAX MIN	0.96 -0.94		12-27	MAX MIN	3.17 1.09	01-11	MAX MIN	1.01 -0.66	01-27	MAX MIN	3.15 -0.25
12-12	MAX MIN	1.59 -0.83		12-28	MAX MIN	3.23 0.68	01-12	MAX MIN	0.54 -0.66	01-28	MAX MIN	2.96 -0.06
12-13	MAX MIN	1.15 -0.94		12-29	MAX MIN	3.17 0.79	01-13	MAX MIN	0.65 -0.44	01-29	MAX MIN	2.49 -0.25
12-14	MAX MIN	0.71 -0.94		12-30	MAX MIN	3.12 -0.20	01-14	MAX MIN	1.04 -0.47	01-30	MAX MIN	1.59 -0.91
12-15	MAX MIN	0.82 -0.52		12-31	MAX MIN	2.93 -0.74	01-15	MAX MIN	0.76 -0.47	01-31	MAX MIN	1.20 -0.85
12-16	MAX MIN	2.96 -0.28					01-16	MAX MIN	1.48 -0.25			

	1987	1987	1987	1987	1987	1987
02-01 MAX 0.96 MIN -0.88	02-17 MAX 0.54 MIN -0.94	02-18 MAX 0.11 MIN -1.15	02-19 MAX 0.38 MIN -1.15	02-20 MAX 0.30 MIN -1.18	02-21 MAX 0.19 MIN -0.91	02-22 MAX 1.01 MIN -0.69
02-02 MAX 0.76 MIN -0.25	03-01 MAX 5.12 MIN 3.61	03-02 MAX 5.06 MIN 3.23	03-03 MAX 4.60 MIN 3.17	03-04 MAX 5.09 MIN 3.20	03-05 MAX 4.79 MIN 2.54	03-06 MAX 4.19 MIN 2.00
02-03 MAX 0.87 MIN -0.33	03-17 MAX 1.36 MIN -0.12	03-18 MAX 3.01 MIN 0.02	03-19 MAX 3.03 MIN 0.38	03-20 MAX 2.95 MIN 0.57	03-21 MAX 3.17 MIN 1.06	03-22 MAX 3.12 MIN 0.10
02-04 MAX 0.68 MIN -0.58	03-07 MAX 3.61 MIN 1.45	03-08 MAX 3.26 MIN 1.06	03-09 MAX 2.87 MIN -0.12	03-10 MAX 2.62 MIN -0.17	03-23 MAX 2.92 MIN 0.39	03-24 MAX 3.36 MIN 0.29
02-05 MAX 0.96 MIN -1.18	03-11 MAX 1.61 MIN -0.80	03-12 MAX 1.25 MIN -0.77	03-13 MAX 0.73 MIN -0.36	03-26 MAX 2.79 MIN -0.58	03-27 MAX 1.17 MIN -0.47	03-28 MAX 1.39 MIN -0.72
02-06 MAX 0.30 MIN -0.63	03-14 MAX 1.01 MIN -0.14	03-15 MAX 0.95 MIN -0.25	03-16 MAX 0.93 MIN -0.25	03-30 MAX 1.15 MIN -1.02	03-31 MAX 0.74 MIN -0.31	
02-07 MAX 0.41 MIN -0.55	02-23 MAX 1.17 MIN -0.33	02-24 MAX 1.26 MIN -0.52	02-25 MAX 1.67 MIN -0.33	02-26 MAX 3.61 MIN -0.39		
02-08 MAX 0.49 MIN -0.61						
02-09 MAX 0.54 MIN -0.74						
02-10 MAX 1.67 MIN -0.50						
02-11 MAX 0.96 MIN -0.63						
02-12 MAX 1.23 MIN -1.02						
02-13 MAX 0.41 MIN -0.66						
02-14 MAX 0.57 MIN -0.80						
02-15 MAX 1.23 MIN -0.52						
02-16 MAX 0.98 MIN -0.66						

TABLE 1D.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY VELOCITY DATA, OCTOBER 1986 TO JULY 1988--CONTINUED

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.2 OF TOTAL  
DEPTH (7 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988

	1987	1987	1987	1987	1987
04-01	MAX 0.76 MIN -0.50	04-17 MAX 1.39 MIN -0.66	05-01 MAX 0.90 MIN -0.25	05-17 MAX 0.76 MIN -0.52	
04-02	MAX 0.98 MIN -0.50	04-18 MAX 0.79 MIN -0.06	05-02 MAX 0.74 MIN -0.09	05-18 MAX 0.82 MIN -0.44	
04-03	MAX 0.73 MIN -0.64	04-19 MAX 0.73 MIN -0.12	05-03 MAX 0.85 MIN -0.11	05-19 MAX 2.60 MIN -0.69	
04-04	MAX 0.54 MIN -0.17	04-20 MAX 0.79 MIN -0.12	05-04 MAX 0.74 MIN -0.25	05-20 MAX 1.26 MIN -0.72	
04-05	MAX 0.65 MIN -0.20	04-21 MAX 0.68 MIN -0.17	05-05 MAX 0.71 MIN -0.44	05-21 MAX 1.01 MIN -0.41	
04-06	MAX 0.79 MIN -0.28	04-22 MAX 0.76 MIN -0.33	05-06 MAX 1.37 MIN -0.33	05-22 MAX 0.79 MIN -0.14	
04-07	MAX 0.79 MIN -0.14	04-23 MAX 0.82 MIN -0.28	05-07 MAX 0.74 MIN -0.20	05-23 MAX 0.90 MIN -0.41	
04-08	MAX 0.73 MIN 0.05	04-24 MAX 0.85 MIN -0.20	05-08 MAX 0.93 MIN -0.22	05-24 MAX 1.01 MIN 0.00	
04-09	MAX 0.76 MIN 0.13	04-25 MAX 0.52 MIN -0.03	05-09 MAX 0.98 MIN -0.03	05-25 MAX 1.15 MIN -0.03	
04-10	MAX 0.82 MIN 0.30	04-26 MAX 0.87 MIN -0.41	05-10 MAX 1.31 MIN -0.50	05-26 MAX 1.26 MIN -0.03	
04-11	MAX 1.06 MIN 0.05	04-27 MAX 0.82 MIN -0.36	05-11 MAX 1.20 MIN -0.31	05-27 MAX 1.20 MIN -0.41	
04-12	MAX 1.06 MIN -0.31	04-28 MAX 0.98 MIN 0.02	05-12 MAX 0.96 MIN -0.20	05-28 MAX 1.37 MIN -0.06	
04-13	MAX 0.92 MIN -0.80	04-29 MAX 1.04 MIN -0.03	05-13 MAX 0.79 MIN -0.22	05-29 MAX 1.15 MIN -0.28	
04-14	MAX 0.95 MIN -0.20	04-30 MAX 0.87 MIN -0.06	05-14 MAX 0.96 MIN -0.09	05-30 MAX 0.90 MIN -0.33	
04-15	MAX 0.90 MIN -0.58		05-15 MAX 0.90 MIN -0.47	05-31 MAX 1.26 MIN -0.44	
04-16	MAX 0.87 MIN -0.64		05-16 MAX 0.76 MIN -0.14		



TABLE 1D.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY VELOCITY DATA, OCTOBER 1986 TO JULY 1988--CONTINUED

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.2 OF TOTAL  
DEPTH (7 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988

		1987	1987	1987	1987	1987
		08-01	MAX 1.06 MIN 0.00	08-17 MAX 0.93 MIN -0.36	09-01 MAX 0.57 MIN 0.00	09-17 MAX 0.87 MIN 0.13
08-02	MAX	1.01	08-18 MAX 0.82 MIN -0.06	09-02 MAX 0.71 MIN -0.11	09-18 MAX 0.98 MIN -0.44	
08-03	MAX	1.06	08-19 MAX 0.74 MIN -0.14	09-03 MAX 0.79 MIN -0.20	09-19 MAX 0.90 MIN -0.31	
08-04	MAX	1.28	08-20 MAX 0.85 MIN -0.22	09-04 MAX 0.82 MIN -0.28	09-20 MAX 0.93 MIN -0.31	
08-05	MAX	1.17	08-21 MAX 0.90 MIN -0.28	09-05 MAX 0.98 MIN -0.03	09-21 MAX 0.79 MIN -0.20	
08-06	MAX	1.23	08-22 MAX 0.82 MIN -0.28	09-06 MAX 1.15 MIN -0.09	09-22 MAX 0.71 MIN -0.06	
08-07	MAX	1.04	08-23 MAX 1.01 MIN 0.00	09-07 MAX 1.06 MIN -0.06	09-23 MAX 0.65 MIN -0.20	
08-08	MAX	1.17	08-24 MAX 0.96 MIN -0.17	09-08 MAX 1.17 MIN 0.16	09-24 MAX 0.85 MIN -0.03	
08-09	MAX	1.06	08-25 MAX 0.87 MIN 0.05	09-09 MAX 1.09 MIN 0.00	09-25 MAX 0.82 MIN -0.06	
08-10	MAX	1.15	08-26 MAX 0.96 MIN -0.17	09-10 MAX 0.96 MIN -0.06	09-26 MAX 0.82 MIN 0.08	
08-11	MAX	1.09	08-27 MAX 0.93 MIN 0.08	09-11 MAX 1.06 MIN -0.14	09-27 MAX 0.93 MIN 0.00	
08-12	MAX	0.96	08-28 MAX 0.85 MIN -0.36	09-12 MAX 1.15 MIN -0.17	09-28 MAX 0.76 MIN -0.11	
08-13	MAX	0.90	08-29 MAX 0.76 MIN -0.31	09-13 MAX 0.93 MIN 0.05	09-29 MAX 1.17 MIN -0.31	
08-14	MAX	0.82	08-30 MAX 0.79 MIN -0.31	09-14 MAX 0.82 MIN 0.05	09-30 MAX 1.23 MIN -0.47	
08-15	MAX	0.76	08-31 MAX 0.60 MIN 0.05	09-15 MAX 0.85 MIN 0.13		
08-16	MAX	0.93		09-16 MAX 0.96 MIN -0.11		

			1987	1987	1987	1987	1987	1987	1987	1987	1987	1987	1987	1987
			10-01	MAX	1.09	10-17	MAX	0.96	11-01	MAX	0.85	11-17	MAX	3.04
			MIN	0.19		MIN	0.05	MIN	-0.14		MIN	1.15		
10-02	MAX	1.09		10-18	MAX	0.96		11-02	MAX	0.52	11-18	MAX	3.31	
	MIN	0.22		MIN	0.16		MIN	0.36	MIN	-0.36	MIN	1.72		
10-03	MAX	0.85		10-19	MAX	1.01		11-03	MAX	0.71	11-19	MAX	3.59	
	MIN	0.16		MIN	0.19		MIN	0.36	MIN	-0.36	MIN	2.11		
10-04	MAX	1.20		10-20	MAX	0.98		11-04	MAX	0.46	11-20	MAX	4.60	
	MIN	0.13		MIN	0.16		MIN	0.17	MIN	-0.17	MIN	2.49		
10-05	MAX	1.15		10-21	MAX	1.26		11-05	MAX	0.38	11-21	MAX	4.82	
	MIN	0.11		MIN	0.17		MIN	0.39	MIN	-0.39	MIN	2.87		
10-06	MAX	1.01		10-22	MAX	0.93		11-06	MAX	0.57	11-22	MAX	5.01	
	MIN	0.22		MIN	0.05		MIN	0.52	MIN	-0.52	MIN	2.85		
10-07	MAX	1.06		10-23	MAX	0.82		11-07	MAX	0.27	11-23	MAX	4.49	
	MIN	0.24		MIN	0.11		MIN	0.44	MIN	-0.44	MIN	2.60		
10-08	MAX	0.93		10-24	MAX	0.93		11-08	MAX	0.16	11-24	MAX	3.86	
	MIN	0.19		MIN	0.02		MIN	0.72	MIN	-0.72	MIN	1.07		
10-09	MAX	1.09		10-25	MAX	0.93		11-09	MAX	0.27	11-25	MAX	4.00	
	MIN	0.13		MIN	0.16		MIN	0.88	MIN	-0.88	MIN	1.26		
10-10	MAX	1.23		10-26	MAX	0.87		11-10	MAX	0.41	11-26	MAX	4.11	
	MIN	0.19		MIN	0.39		MIN	1.21	MIN	-1.21	MIN	1.70		
10-11	MAX	0.85		10-27	MAX	1.06		11-11	MAX	-0.17	11-27	MAX	4.00	
	MIN	0.19		MIN	0.83		MIN	0.96	MIN	-0.96	MIN	1.31		
10-12	MAX	1.45		10-28	MAX	0.52		11-12	MAX	0.16	11-28	MAX	3.89	
	MIN	0.13		MIN	0.22		MIN	0.91	MIN	-0.91	MIN	1.42		
10-13	MAX	0.76		10-29	MAX	0.93		11-13	MAX	-0.25	11-29	MAX	3.29	
	MIN	0.27		MIN	0.25		MIN	0.74	MIN	-0.74	MIN	1.45		
10-14	MAX	0.60		10-30	MAX	1.04		11-14	MAX	-0.17	11-30	MAX	2.41	
	MIN	0.11		MIN	0.03		MIN	0.77	MIN	-0.77	MIN	0.98		
10-15	MAX	0.82		10-31	MAX	0.63		11-15	MAX	0.22				
	MIN	0.05		MIN	0.50		MIN	0.91	MIN	-0.91				
10-16	MAX	0.90												
	MIN	0.19												

TABLE 1D.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY VELOCITY DATA, OCTOBER 1986 TO JULY 1988--CONTINUED

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.2 OF TOTAL  
DEPTH (7 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988

		1987	1987	1988	1988	
		12-01	MAX 2.30 MIN 0.19	12-17 MAX 0.76 MIN -0.44	01-01 MAX 1.53 MIN -0.11	01-17 MAX MIN ---
12-02	MAX 2.14 MIN 0.24		12-18 MAX 1.39 MIN -0.41	01-02 MAX 1.78 MIN -0.31	01-18 MAX MIN ---	
12-03	MAX 1.56 MIN -0.06		12-19 MAX 1.23 MIN -0.31	01-03 MAX 1.53 MIN -0.36	01-19 MAX MIN ---	
12-04	MAX 1.72 MIN -0.39		12-20 MAX 1.12 MIN -0.61	01-04 MAX 1.56 MIN -0.22	01-20 MAX MIN ---	
12-05	MAX 0.90 MIN -0.50		12-21 MAX 1.37 MIN -0.33	01-05 MAX 1.45 MIN -0.09	01-21 MAX MIN ---	
12-06	MAX 1.06 MIN -0.33		12-22 MAX 1.67 MIN -0.39	01-06 MAX MIN ---	01-22 MAX MIN ---	
12-07	MAX 2.49 MIN -0.20		12-23 MAX 1.56 MIN -0.31	01-07 MAX MIN ---	01-23 MAX MIN ---	
12-08	MAX 3.04 MIN 0.24		12-24 MAX 1.89 MIN -0.11	01-08 MAX MIN ---	01-24 MAX MIN ---	
12-09	MAX 2.35 MIN 0.02		12-25 MAX 2.54 MIN 0.05	01-09 MAX MIN ---	01-25 MAX MIN ---	
12-10	MAX 1.80 MIN 0.02		12-26 MAX 2.38 MIN 0.38	01-10 MAX MIN ---	01-26 MAX MIN ---	
12-11	MAX 2.11 MIN 0.08		12-27 MAX 2.11 MIN 0.46	01-11 MAX MIN ---	01-27 MAX MIN ---	
12-12	MAX 1.56 MIN -0.33		12-28 MAX 2.02 MIN 0.32	01-12 MAX MIN ---	01-28 MAX MIN ---	
12-13	MAX 0.96 MIN -0.72		12-29 MAX 2.49 MIN 0.19	01-13 MAX MIN ---	01-29 MAX MIN ---	
12-14	MAX 1.26 MIN -0.58		12-30 MAX 1.17 MIN -0.44	01-14 MAX MIN ---	01-30 MAX MIN ---	
12-15	MAX 1.61 MIN -0.39		12-31 MAX 0.93 MIN -0.50	01-15 MAX MIN ---	01-31 MAX MIN ---	
12-16	MAX 1.89 MIN -0.83			01-16 MAX MIN ---		

1988	02-01	MAX	---	1988	02-17	MAX	---	1988	03-01	MAX	2.11	1988	03-17	MAX	3.64
		MIN	---			MIN	---			MIN	-0.17		MIN	0.98	
02-02	MAX	---		02-18	MAX	---		02-03	MAX	1.34	0.05	03-18	MAX	4.00	
	MIN	---			MIN	---			MIN	0.05		MIN	0.49		
02-04	MAX	---		02-19	MAX	---		02-05	MAX	1.61	0.27	03-19	MAX	4.82	
	MIN	---			MIN	---			MIN	0.49		MIN	1.42		
02-06	MAX	---		02-20	MAX	---		02-07	MAX	2.05	0.49	03-20	MAX	3.83	
	MIN	---			MIN	---			MIN	0.49		MIN	0.87		
02-08	MAX	---		02-21	MAX	---		02-09	MAX	1.86	0.02	03-21	MAX	2.41	
	MIN	---			MIN	---			MIN	0.02		MIN	1.50		
02-10	MAX	---		02-22	MAX	---		02-11	MAX	1.61	0.32	03-22	MAX	3.59	
	MIN	---			MIN	---			MIN	0.32		MIN	1.15		
02-12	MAX	---		02-23	MAX	---		02-13	MAX	1.61	0.43	03-23	MAX	2.74	
	MIN	---			MIN	---			MIN	0.43		MIN	1.17		
02-14	MAX	---		02-24	MAX	---		02-15	MAX	3.48	0.71	03-24	MAX	1.86	
	MIN	---			MIN	---			MIN	0.71		MIN	0.98		
02-16	MAX	---		02-25	MAX	---		02-17	MAX	4.93	2.27	03-25	MAX	1.75	
	MIN	---			MIN	---			MIN	2.27		MIN	0.76		
02-18	MAX	---		02-26	MAX	---		02-19	MAX	5.07	3.70	03-26	MAX	2.11	
	MIN	---			MIN	---			MIN	3.70		MIN	0.22		
02-20	MAX	---		02-27	MAX	---		02-21	MAX	5.07	2.19	03-27	MAX	1.56	
	MIN	---			MIN	---			MIN	2.19		MIN	-0.20		
02-22	MAX	---		02-28	MAX	---		02-23	MAX	5.07	0.32	03-28	MAX	1.20	
	MIN	---			MIN	---			MIN	0.32		MIN	0.13		
02-24	MAX	---		02-29	MAX	---		02-25	MAX	5.12	2.68	03-29	MAX	1.26	
	MIN	---			MIN	---			MIN	2.68		MIN	0.16		
02-26	MAX	---						02-27	MAX	5.01	2.41	03-30	MAX	1.20	
	MIN	---							MIN	2.41		MIN	0.35		
02-28	MAX	---						02-29	MAX	5.12	1.50	03-31	MAX	1.50	
	MIN	---							MIN	1.50		MIN	-0.44		
02-30	MAX	---						02-31	MAX	5.09	2.52				
	MIN	---							MIN	2.52					

TABLE 1D.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA, DAILY VELOCITY DATA,  
OCTOBER 1986 TO JULY 1988--CONTINUED

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.2 OF TOTAL DEPTH (7 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988						
1988	1988	1988	1988	1988	1988	1988
04-01 MAX 1.28	04-17 MAX 1.39	05-01 MAX 1.15	05-17 MAX 0.76	06-01 MAX 0.85		
MIN 0.02	MIN -0.28	MIN -0.11	MIN -0.36	MIN -0.44		
04-02 MAX 3.34	04-18 MAX 1.20	05-02 MAX 1.17	05-18 MAX 0.74	06-02 MAX 0.82		
MIN 0.90	MIN 0.11	MIN -0.06	MIN -0.14	MIN -0.14		
04-03 MAX 3.50	04-19 MAX 0.98	05-03 MAX 1.09	05-19 MAX 0.79	06-03 MAX 1.09		
MIN 1.94	MIN 0.00	MIN 0.08	MIN -0.11	MIN -0.39		
04-04 MAX 3.37	04-20 MAX 1.06	05-04 MAX 0.90	05-20 MAX 0.79	06-04 MAX 0.85		
MIN 1.80	MIN -0.11	MIN -0.25	MIN -0.20	MIN -0.52		
04-05 MAX 3.26	04-21 MAX 0.96	05-05 MAX 0.90	05-21 MAX 0.82	06-05 MAX 0.87		
MIN 1.64	MIN -0.22	MIN -0.20	MIN -0.50	MIN -0.31		
04-06 MAX 3.56	04-22 MAX 1.09	05-06 MAX 1.39	05-22 MAX 0.74	06-06 MAX 0.71		
MIN 1.97	MIN 0.00	MIN -0.69	MIN -0.58	MIN -0.36		
04-07 MAX 3.89	04-23 MAX 0.87	05-07 MAX 0.85	05-23 MAX 1.23	06-07 MAX 0.65		
MIN 1.91	MIN -0.36	MIN -0.17	MIN -0.96	MIN -0.17		
04-08 MAX 3.37	04-24 MAX 1.15	05-08 MAX 1.01	05-24 MAX 0.93	06-08 MAX 0.85		
MIN 1.45	MIN -0.55	MIN -0.22	MIN -0.47	MIN -0.22		
04-09 MAX 2.98	04-25 MAX 1.15	05-09 MAX 0.87	05-25 MAX 0.68	06-09 MAX 0.63		
MIN 1.06	MIN -0.58	MIN -0.36	MIN -0.61	MIN -0.11		
04-10 MAX 1.69	04-26 MAX 0.87	05-10 MAX 0.68	05-26 MAX 0.54			
MIN 0.02	MIN 0.13	MIN -0.47	MIN -0.47			
04-11 MAX 1.34	04-27 MAX 0.90	05-11 MAX 0.90	05-27 MAX 0.63			
MIN -0.63	MIN 0.19	MIN -0.31	MIN -0.33			
04-12 MAX 2.43	04-28 MAX 1.01	05-12 MAX 0.68	05-28 MAX 0.87			
MIN -0.39	MIN -0.11	MIN -0.36	MIN -0.31			
04-13 MAX 1.15	04-29 MAX 1.09	05-13 MAX 0.82	05-29 MAX 0.85			
MIN -0.28	MIN -0.14	MIN -0.36	MIN -0.36			
04-14 MAX 0.85	04-30 MAX 1.06	05-14 MAX 0.85	05-30 MAX 0.85			
MIN -0.31	MIN 0.08	MIN -0.50	MIN -0.28			
04-15 MAX 1.12		05-15 MAX 0.74	05-31 MAX 0.87			
MIN 0.13		MIN -0.41	MIN -0.28			
04-16 MAX 1.12		05-16 MAX 0.74				
MIN 0.02		MIN -0.25				

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.8 OF TOTAL  
DEPTH (30 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988

		1986	1986	1986	1986
10-01	MAX	0.98	10-17 MAX 1.01	11-01 MAX 1.01	11-17 MAX 1.06
	MIN	-1.05	MIN -0.80	MIN -1.37	MIN -1.37
10-02	MAX	0.90	10-18 MAX 1.09	11-02 MAX 1.06	11-18 MAX 0.96
	MIN	-0.99	MIN -0.69	MIN -1.43	MIN -0.55
10-03	MAX	0.85	10-19 MAX 1.04	11-03 MAX 0.85	11-19 MAX 0.87
	MIN	-1.26	MIN -0.80	MIN -0.96	MIN -0.96
10-04	MAX	0.98	10-20 MAX 0.54	11-04 MAX 1.04	11-20 MAX 1.12
	MIN	-1.24	MIN -1.54	MIN -2.44	MIN -1.32
10-05	MAX	1.42	10-21 MAX 1.31	11-05 MAX 1.94	11-21 MAX 0.98
	MIN	-1.05	MIN -1.37	MIN -1.81	MIN -1.37
10-06	MAX	1.01	10-22 MAX 0.96	11-06 MAX 1.53	11-22 MAX 1.17
	MIN	-1.46	MIN -1.78	MIN -0.55	MIN -1.29
10-07	MAX	0.85	10-23 MAX 1.34	11-07 MAX 1.56	11-23 MAX 1.72
	MIN	-1.24	MIN -1.81	MIN -0.66	MIN -1.48
10-08	MAX	0.38	10-24 MAX 3.45	11-08 MAX 1.53	11-24 MAX 3.09
	MIN	-0.85	MIN -1.48	MIN -0.41	MIN -0.74
10-09	MAX	0.96	10-25 MAX 2.79	11-09 MAX 1.56	11-25 MAX 3.42
	MIN	-0.94	MIN -0.50	MIN -0.31	MIN -0.33
10-10	MAX	0.35	10-26 MAX 1.17	11-10 MAX 1.37	11-26 MAX 1.72
	MIN	-1.18	MIN -0.36	MIN -0.17	MIN 0.60
10-11	MAX	0.74	10-27 MAX 1.01	11-11 MAX 1.50	11-27 MAX 1.80
	MIN	-1.21	MIN -0.80	MIN -0.99	MIN 0.46
10-12	MAX	0.60	10-28 MAX 0.96	11-12 MAX 1.15	11-28 MAX 2.13
	MIN	-1.59	MIN -0.66	MIN -0.63	MIN 0.11
10-13	MAX	1.26	10-29 MAX 0.49	11-13 MAX 2.43	11-29 MAX 1.80
	MIN	-1.32	MIN -0.69	MIN 0.00	MIN -0.50
10-14	MAX	0.68	10-30 MAX 0.96	11-14 MAX 0.54	11-30 MAX 1.67
	MIN	-1.05	MIN -1.07	MIN -0.80	MIN -0.52
10-15	MAX	0.22	10-31 MAX 0.57	11-15 MAX 0.90	
	MIN	-1.18	MIN -0.80	MIN -0.99	
10-16	MAX	1.28		11-16 MAX 1.28	
	MIN	-0.88		MIN -1.65	

TABLE 1D.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY VELOCITY DATA, OCTOBER 1986 TO JULY 1988--CONTINUED

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.8 OF TOTAL  
DEPTH (30 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988

	1986	1986	1986	1987	1987	1987
12-01	MAX 1.83 MIN -0.63	12-17 MAX 1.59 MIN 0.19	01-01 MAX 1.67 MIN -1.65	01-17 MAX 3.31 MIN 1.01		
12-02	MAX 2.43 MIN -0.47	12-18 MAX 2.27 MIN 0.52	01-02 MAX 1.48 MIN -2.22	01-18 MAX 2.57 MIN 0.57		
12-03	MAX 2.68 MIN -1.24	12-19 MAX 1.86 MIN -0.20	01-03 MAX 3.91 MIN -1.13	01-19 MAX 3.59 MIN 0.30		
12-04	MAX 2.63 MIN -0.94	12-20 MAX 1.53 MIN -0.33	01-04 MAX 1.59 MIN -0.50	01-20 MAX 3.06 MIN -0.36		
12-05	MAX 1.94 MIN -2.11	12-21 MAX 1.78 MIN -0.74	01-05 MAX 1.20 MIN -0.33	01-21 MAX 3.39 MIN -0.69		
12-06	MAX 1.64 MIN -0.80	12-22 MAX 1.83 MIN -0.42	01-06 MAX 2.05 MIN -0.22	01-22 MAX 3.72 MIN -0.42		
12-07	MAX 2.08 MIN -0.83	12-23 MAX 2.63 MIN 0.43	01-07 MAX 2.08 MIN -0.06	01-23 MAX 4.16 MIN -2.83		
12-08	MAX 1.72 MIN -1.18	12-24 MAX 2.27 MIN 0.11	01-08 MAX 2.00 MIN -0.39	01-24 MAX 3.15 MIN -1.92		
12-09	MAX 2.08 MIN -1.95	12-25 MAX 2.30 MIN -1.21	01-09 MAX 2.27 MIN -0.58	01-25 MAX 3.31 MIN -1.65		
12-10	MAX 2.11 MIN 0.49	12-26 MAX 2.16 MIN -1.37	01-10 MAX 2.13 MIN -0.11	01-26 MAX 2.22 MIN -2.61		
12-11	MAX 2.68 MIN -0.36	12-27 MAX 2.13 MIN -1.13	01-11 MAX 1.83 MIN -0.42	01-27 MAX 3.31 MIN -2.28		
12-12	MAX 2.96 MIN -0.17	12-28 MAX 1.91 MIN -1.21	01-12 MAX 1.09 MIN -0.28	01-28 MAX 2.11 MIN -1.79		
12-13	MAX 1.61 MIN -0.55	12-29 MAX 2.16 MIN -1.51	01-13 MAX 1.15 MIN -0.47	01-29 MAX 1.28 MIN -1.54		
12-14	MAX 1.39 MIN -0.72	12-30 MAX 2.16 MIN -2.09	01-14 MAX 2.16 MIN -0.63	01-30 MAX 1.20 MIN -2.55		
12-15	MAX 1.59 MIN -0.20	12-31 MAX 1.80 MIN -1.92	01-15 MAX 1.15 MIN -0.52	01-31 MAX 1.48 MIN -1.76		
12-16	MAX 3.91 MIN 0.98		01-16 MAX 3.75 MIN -0.20			

			1987		1987		1987		1987		1987	
02-01	MAX	0.90	02-17	MAX	1.91	03-01	MAX	3.34	03-17	MAX	2.22	
	MIN	-0.83		MIN	0.13		MIN	-0.36		MIN	-0.28	
02-02	MAX	0.93	02-18	MAX	1.83	03-02	MAX	4.00	03-18	MAX	2.05	
	MIN	-0.33		MIN	-0.09		MIN	0.02		MIN	-2.94	
02-03	MAX	0.90	02-19	MAX	1.78	03-03	MAX	3.50	03-19	MAX	1.17	
	MIN	-0.52		MIN	-0.31		MIN	-0.58		MIN	-0.50	
02-04	MAX	0.85	02-20	MAX	1.94	03-04	MAX	3.34	03-20	MAX	1.23	
	MIN	-0.47		MIN	-0.36		MIN	-1.51		MIN	-0.39	
02-05	MAX	0.71	02-21	MAX	3.34	03-05	MAX	3.64	03-21	MAX	1.26	
	MIN	-0.66		MIN	-0.72		MIN	-1.18		MIN	-1.07	
02-06	MAX	2.00	02-22	MAX	3.04	03-06	MAX	4.49	03-22	MAX	1.56	
	MIN	-0.80		MIN	0.71		MIN	-1.68		MIN	-0.36	
02-07	MAX	0.95	02-23	MAX	2.24	03-07	MAX	4.19	03-23	MAX	1.45	
	MIN	-0.61		MIN	0.13		MIN	-1.95		MIN	-0.36	
02-08	MAX	1.61	02-24	MAX	2.98	03-08	MAX	2.41	03-24	MAX	1.67	
	MIN	-0.85		MIN	-0.11		MIN	-0.55		MIN	-1.48	
02-09	MAX	2.11	02-25	MAX	3.64	03-09	MAX	3.15	03-25	MAX	1.06	
	MIN	-0.74		MIN	0.87		MIN	-0.94		MIN	-1.95	
02-10	MAX	0.43	02-26	MAX	4.24	03-10	MAX	1.31	03-26	MAX	1.89	
	MIN	-0.74		MIN	0.79		MIN	-0.33		MIN	-2.99	
02-11	MAX	1.31	02-27	MAX	2.90	03-11	MAX	1.72	03-27	MAX	2.32	
	MIN	-1.57		MIN	0.68		MIN	-0.36		MIN	-0.61	
02-12	MAX	4.41	02-28	MAX	3.06	03-12	MAX	1.80	03-28	MAX	2.05	
	MIN	-0.83		MIN	0.52		MIN	-0.31		MIN	-1.29	
02-13	MAX	0.35				03-13	MAX	1.50	03-29	MAX	2.60	
	MIN	-0.58					MIN	-0.03		MIN	-0.80	
02-14	MAX	0.98				03-14	MAX	0.98	03-30	MAX	2.02	
	MIN	-0.99					MIN	-0.33		MIN	-0.03	
02-15	MAX	1.09				03-15	MAX	0.87	03-31	MAX	0.38	
	MIN	-1.05					MIN	-0.36		MIN	-0.85	
02-16	MAX	3.80				03-16	MAX	0.35				
	MIN	0.16					MIN	-0.36				

TABLE 1D.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY VELOCITY DATA, OCTOBER 1986 TO JULY 1988--CONTINUED

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.8 OF TOTAL  
DEPTH (30 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988

			1987	1987	1987	1987
04-01	MAX	0.84	04-17 MAX MIN -1.59	1.53 MIN -1.59	05-01 MAX MIN -1.29	0.27 MIN -0.39
04-02	MAX	1.64	04-18 MAX MIN -0.58	0.30 MIN -0.58	05-02 MAX MIN -1.43	0.24 MIN -0.17
04-03	MAX	1.86	04-19 MAX MIN -0.66	0.60 MIN -0.66	05-03 MAX MIN -1.40	0.35 MIN -0.94
04-04	MAX	0.35	04-20 MAX MIN -0.72	0.21 MIN -0.72	05-04 MAX MIN -1.07	0.13 MIN ---
04-05	MAX	0.46	04-21 MAX MIN -0.80	0.16 MIN -0.80	05-05 MAX MIN -1.13	0.49 MIN ---
04-06	MAX	0.54	04-22 MAX MIN -1.07	0.96 MIN -1.07	05-06 MAX MIN -0.94	1.04 MIN ---
04-07	MAX	0.32	04-23 MAX MIN -0.80	0.13 MIN -0.80	05-07 MAX MIN -0.58	0.30 MIN ---
04-08	MAX	0.27	04-24 MAX MIN -1.21	0.13 MIN -1.21	05-08 MAX MIN -0.39	0.85 MIN ---
04-09	MAX	0.43	04-25 MAX MIN -0.83	-0.17 MIN -0.83	05-09 MAX MIN -0.72	1.17 MIN ---
04-10	MAX	0.30	04-26 MAX MIN -0.96	-0.09 MIN -0.96	05-10 MAX MIN -0.66	2.49 MIN ---
04-11	MAX	0.65	04-27 MAX MIN -1.32	0.05 MIN -1.32	05-11 MAX MIN -0.80	0.98 MIN ---
04-12	MAX	0.41	04-28 MAX MIN -0.88	-0.20 MIN -0.88	05-12 MAX MIN -0.66	0.65 MIN ---
04-13	MAX	0.24	04-29 MAX MIN -1.27	-0.09 MIN -1.27	05-13 MAX MIN -0.66	0.27 MIN ---
04-14	MAX	0.52	04-30 MAX MIN -1.43	0.08 MIN -1.35	05-14 MAX MIN -0.33	0.71 MIN ---
04-15	MAX	0.52			05-15 MAX MIN -0.33	0.96 MIN ---
04-16	MAX	0.52			05-16 MAX MIN -0.52	1.37 MIN ---

		1987	1987	1987	1987	1987	1987
06-01	MAX	---	06-17	MAX 1.31	07-01 MAX 1.80	07-17 MAX 1.06	MIN -0.74
	MIN		MIN -0.25	MIN -0.09	MIN -0.28	MIN -0.69	
06-02	MAX	0.79	06-18	MAX 1.17	07-02 MAX 1.09	07-18 MAX 0.82	MIN -0.63
	MIN	-0.11	MIN -0.14	MIN -0.36	MIN -0.31	MIN -0.47	
06-03	MAX	1.01	06-19	MAX 1.23	07-03 MAX 1.48	07-19 MAX 0.60	MIN -0.63
	MIN	-0.88	MIN -0.72	MIN -0.50	MIN -0.50	MIN -0.63	
06-04	MAX	0.30	06-20	MAX 1.17	07-04 MAX 1.20	07-20 MAX 0.32	MIN -0.63
	MIN	-0.58	MIN -2.83	MIN -1.10	MIN -1.10	MIN -0.63	
06-05	MAX	1.23	06-21	MAX 0.98	07-05 MAX 0.60	07-21 MAX 0.32	MIN -0.63
	MIN	-0.50	MIN -1.07	MIN -1.13	MIN -1.57	MIN -0.44	
06-06	MAX	0.96	06-22	MAX 1.45	07-06 MAX 0.63	07-22 MAX 0.60	MIN -0.44
	MIN	-0.63	MIN -0.77	MIN -0.77	MIN -0.96	MIN -0.94	
06-07	MAX	0.65	06-23	MAX 0.68	07-07 MAX 0.76	07-23 MAX 0.43	MIN -0.42
	MIN	-0.96	MIN -1.07	MIN -1.18	MIN -1.18	MIN -0.55	
06-08	MAX	0.60	06-24	MAX 1.12	07-08 MAX 2.57	07-24 MAX 0.11	MIN -0.55
	MIN	-0.80	MIN -0.77	MIN -2.03	MIN -2.03	MIN -0.55	
06-09	MAX	0.79	06-25	MAX 0.93	07-09 MAX 1.34	07-25 MAX 0.30	MIN -0.94
	MIN	-0.85	MIN -0.36	MIN -0.96	MIN -0.96	MIN -0.94	
06-10	MAX	0.27	06-26	MAX 3.37	07-10 MAX 0.98	07-26 MAX 1.15	MIN -0.96
	MIN	-2.14	MIN -0.25	MIN -1.02	MIN -1.02	MIN -0.55	
06-11	MAX	1.23	06-27	MAX 0.68	07-11 MAX 0.98	07-27 MAX 0.41	MIN -0.55
	MIN	-0.61	MIN -0.22	MIN -0.88	MIN -0.88	MIN -0.55	
06-12	MAX	1.09	06-28	MAX 0.63	07-12 MAX 0.87	07-28 MAX 0.11	MIN -0.66
	MIN	-0.22	MIN -0.55	MIN -1.43	MIN -1.43	MIN -0.66	
06-13	MAX	1.45	06-29	MAX 0.24	07-13 MAX 0.76	07-29 MAX 0.30	MIN -0.47
	MIN	-0.11	MIN -0.58	MIN -0.06	MIN -0.06	MIN -0.47	
06-14	MAX	3.86	06-30	MAX 2.00	07-14 MAX 0.71	07-30 MAX 0.52	MIN -0.44
	MIN	0.13	MIN -0.33	MIN -0.25	MIN -0.25	MIN -0.44	
06-15	MAX	1.59			07-15 MAX 0.63	07-31 MAX 2.22	MIN -1.05
	MIN	-0.17			MIN -0.47	MIN -1.05	
06-16	MAX	1.83			07-16 MAX 0.68		
	MIN	-0.28			MIN -1.57		

TABLE 1D. --LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY VELOCITY DATA, OCTOBER 1986 TO JULY 1988--CONTINUED

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.8 OF TOTAL  
DEPTH (30 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988

			1987	1987	1987	1987	1987
			08-01	08-17	09-01	09-01	09-17
			MAX	MAX	MAX	MAX	MAX
			MIN	MIN	MIN	MIN	MIN
08-01	MAX	0.43	0.52	0.24	0.25	0.25	0.69
08-02	MAX	0.57	0.63	0.33	0.03	0.03	1.35
08-03	MAX	0.21	0.85	0.49	0.03	0.14	1.05
08-04	MAX	0.19	0.91	0.76	0.04	0.16	0.54
08-05	MAX	0.68	0.74	0.27	0.05	0.11	0.20
08-06	MAX	-0.03	0.99	0.30	0.06	0.11	0.38
08-07	MAX	0.43	0.94	0.13	0.07	0.11	0.14
08-08	MAX	0.27	0.63	0.11	0.08	0.11	0.24
08-09	MAX	0.08	0.94	0.14	0.09	0.19	0.25
08-10	MAX	0.60	1.35	0.00	0.10	0.88	0.20
08-11	MAX	0.87	0.42	-0.22	0.11	0.99	0.58
08-12	MAX	1.31	0.31	0.36	0.12	1.59	0.05
08-13	MAX	0.82	0.28	0.49	0.13	0.22	2.56
08-14	MAX	0.54	0.31	0.44	0.14	0.11	1.26
08-15	MAX	0.84	0.47	0.00	0.15	0.11	0.90
08-16	MAX	0.54	0.96	0.00	0.16	0.53	1.39

		1987	1987	1987	1987	1987
10-01	MAX -0.03 MIN -1.18	10-17 MAX -0.09 MIN -1.40	11-01 MAX 0.08 MIN -1.04	11-17 MAX 2.52 MIN 0.63		
10-02	MAX 0.38 MIN -1.10	10-18 MAX -0.22 MIN -1.02	11-02 MAX 0.11 MIN -1.07	11-18 MAX 1.48 MIN 0.00		
10-03	MAX 0.82 MIN -1.35	10-19 MAX -0.14 MIN -1.07	11-03 MAX 0.05 MIN -1.07	11-19 MAX 1.40 MIN -0.08		
10-04	MAX 0.13 MIN -1.18	10-20 MAX 0.05 MIN -1.24	11-04 MAX 0.00 MIN -1.29	11-20 MAX 2.08 MIN -0.44		
10-05	MAX -0.20 MIN -1.02	10-21 MAX 1.01 MIN -1.10	11-05 MAX -0.25 MIN -1.26	11-21 MAX 2.30 MIN -1.10		
10-06	MAX -0.22 MIN -1.21	10-22 MAX -0.20 MIN -1.51	11-06 MAX 0.65 MIN -0.96	11-22 MAX 2.25 MIN -1.07		
10-07	MAX -0.11 MIN -0.99	10-23 MAX -0.03 MIN -1.13	11-07 MAX 0.27 MIN -1.07	11-23 MAX 1.97 MIN -1.18		
10-08	MAX -0.20 MIN -1.32	10-24 MAX 0.57 MIN -1.02	11-08 MAX 0.82 MIN -1.15	11-24 MAX 1.62 MIN -1.15		
10-09	MAX -0.14 MIN -1.48	10-25 MAX 0.82 MIN -1.15	11-09 MAX 1.01 MIN -1.26	11-25 MAX 2.46 MIN -1.10		
10-10	MAX 0.46 MIN -1.37	10-26 MAX 2.87 MIN -1.29	11-10 MAX 3.07 MIN -0.72	11-26 MAX 1.89 MIN -0.69		
10-11	MAX -0.20 MIN -0.85	10-27 MAX 3.61 MIN -0.52	11-11 MAX 1.37 MIN -0.33	11-27 MAX 1.84 MIN -0.36		
10-12	MAX 1.69 MIN -1.40	10-28 MAX 0.46 MIN -0.52	11-12 MAX 0.49 MIN -0.50	11-28 MAX 2.19 MIN -1.75		
10-13	MAX -0.03 MIN -1.32	10-29 MAX 0.87 MIN -0.63	11-13 MAX 0.49 MIN -0.91	11-29 MAX 1.84 MIN -1.01		
10-14	MAX 0.22 MIN -0.74	10-30 MAX 1.20 MIN -0.80	11-14 MAX 0.22 MIN -0.93	11-30 MAX 1.92 MIN -0.14		
10-15	MAX 0.16 MIN -0.99	10-31 MAX 0.63 MIN -0.69	11-15 MAX 0.55 MIN -1.45			
10-16	MAX -0.20 MIN -1.51			11-16 MAX 4.66 MIN -1.45		

TABLE 1D.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY VELOCITY DATA, OCTOBER 1986 TO JULY 1988--CONTINUED

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.8 OF TOTAL  
DEPTH (30 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988

	1987			1988		
	MAX	1.67	12-17 MAX	3.91	01-01 MAX	2.98
	MIN	0.16	MIN	-0.06	MIN	0.73
12-01	MAX	1.34	12-18 MAX	4.35	01-02 MAX	---
	MIN	0.41	MIN	0.21	MIN	---
12-02	MAX	1.34	12-18 MAX	4.35	01-18 MAX	---
	MIN	0.41	MIN	0.21	MIN	---
12-03	MAX	1.75	12-19 MAX	1.28	01-03 MAX	2.98
	MIN	0.03	MIN	-0.94	MIN	0.46
12-04	MAX	2.32	12-20 MAX	4.02	01-04 MAX	3.06
	MIN	0.52	MIN	-0.09	MIN	0.92
12-05	MAX	1.59	12-21 MAX	4.76	01-05 MAX	2.13
	MIN	-0.17	MIN	0.43	MIN	0.87
12-06	MAX	1.20	12-22 MAX	2.93	01-06 MAX	---
	MIN	-0.58	MIN	0.57	MIN	---
12-07	MAX	4.68	12-23 MAX	2.27	01-07 MAX	---
	MIN	-0.94	MIN	0.05	MIN	---
12-08	MAX	2.54	12-24 MAX	4.90	01-08 MAX	---
	MIN	0.76	MIN	0.10	MIN	---
12-09	MAX	3.53	12-25 MAX	2.43	01-09 MAX	---
	MIN	-2.94	MIN	0.02	MIN	---
12-10	MAX	4.24	12-26 MAX	1.06	01-10 MAX	---
	MIN	-2.85	MIN	-0.01	MIN	---
12-11	MAX	1.58	12-27 MAX	4.65	01-11 MAX	---
	MIN	-0.28	MIN	0.24	MIN	---
12-12	MAX	4.98	12-28 MAX	0.90	01-12 MAX	---
	MIN	-2.11	MIN	0.35	MIN	---
12-13	MAX	2.08	12-29 MAX	5.04	01-13 MAX	---
	MIN	-0.11	MIN	-2.25	MIN	---
12-14	MAX	4.43	12-30 MAX	5.01	01-14 MAX	---
	MIN	-1.43	MIN	-0.97	MIN	---
12-15	MAX	4.87	12-31 MAX	4.54	01-15 MAX	---
	MIN	-0.47	MIN	0.54	MIN	---
12-16	MAX	4.52			01-16 MAX	---
	MIN	-0.74			MIN	---

1988 02-01	MAX MIN	---	1988 02-17	MAX MIN	---	1988 03-01	MAX MIN	1.36	1988 03-17	MAX MIN	1.47
02-02	MAX MIN	---	02-18	MAX MIN	---	03-02	MAX MIN	1.06	03-18	MAX MIN	2.84
02-03	MAX MIN	---	02-19	MAX MIN	---	03-03	MAX MIN	2.38	03-19	MAX MIN	3.20
02-04	MAX MIN	---	02-20	MAX MIN	---	03-04	MAX MIN	4.35	03-20	MAX MIN	3.01
02-05	MAX MIN	---	02-21	MAX MIN	---	03-05	MAX MIN	1.23	03-21	MAX MIN	1.20
02-06	MAX MIN	---	02-22	MAX MIN	---	03-06	MAX MIN	1.39	03-22	MAX MIN	5.09
02-07	MAX MIN	---	02-23	MAX MIN	---	03-07	MAX MIN	0.95	03-23	MAX MIN	0.98
02-08	MAX MIN	---	02-24	MAX MIN	---	03-08	MAX MIN	1.53	03-24	MAX MIN	3.56
02-09	MAX MIN	---	02-25	MAX MIN	---	03-09	MAX MIN	1.99	03-25	MAX MIN	3.39
02-10	MAX MIN	---	02-26	MAX MIN	---	03-10	MAX MIN	5.12	03-26	MAX MIN	0.87
02-11	MAX MIN	---	02-27	MAX MIN	---	03-11	MAX MIN	4.27	03-27	MAX MIN	4.98
02-12	MAX MIN	---	02-28	MAX MIN	---	03-12	MAX MIN	4.73	03-28	MAX MIN	0.68
02-13	MAX MIN	---	02-29	MAX MIN	---	03-13	MAX MIN	3.83	03-29	MAX MIN	0.92
02-14	MAX MIN	---				03-14	MAX MIN	3.03	03-30	MAX MIN	4.10
02-15	MAX MIN	---				03-15	MAX MIN	4.73	03-31	MAX MIN	2.02
02-16	MAX MIN	---				03-16	MAX MIN	3.45			
								-1.84			

TABLE 1D.--LOWER CALCASIEU RIVER AT I-10 BRIDGE AT LAKE CHARLES, LOUISIANA,  
DAILY VELOCITY DATA, OCTOBER 1986 TO JULY 1988--CONTINUED

DAILY VELOCITY, FEET PER SECOND, SENSOR LOCATED APPROXIMATELY 0.8 OF TOTAL DEPTH (30 FEET BELOW WATER SURFACE), OCTOBER 1986 TO JULY 1988						
<b>1988</b>				<b>1988</b>		
04-01	MAX 1.17	04-17	MAX -0.01	05-01	MAX 0.51	05-17 MAX 0.13
MIN -0.61	MIN -1.65	MIN -1.65	MIN -0.88	MIN -1.76	MIN -0.88	MIN -0.64
04-02	MAX 1.55	04-18	MAX 0.38	05-02	MAX 0.46	05-18 MAX -0.09
MIN -0.12	MIN -1.05	MIN -1.05	MIN -1.05	MIN -1.76	MIN -1.76	MIN -0.36
04-03	MAX 1.47	04-19	MAX 0.60	05-03	MAX 0.32	05-19 MAX -0.06
MIN -0.88	MIN -0.34	MIN -0.34	MIN -0.86	MIN -0.86	MIN -0.86	MIN -0.43
04-04	MAX 1.42	04-20	MAX 0.32	05-04	MAX 0.84	05-20 MAX 0.10
MIN -1.71	MIN -0.53	MIN -0.53	MIN -0.58	MIN -0.58	MIN -0.58	MIN -0.34
04-05	MAX 1.50	04-21	MAX 2.82	05-05	MAX 0.32	05-21 MAX 1.17
MIN -1.16	MIN -0.75	MIN -0.75	MIN -0.75	MIN -0.53	MIN -0.53	MIN -0.47
04-06	MAX 2.19	04-22	MAX 1.28	05-06	MAX 2.40	05-22 MAX 1.34
MIN -2.23	MIN -0.75	MIN -0.75	MIN -0.75	MIN -1.76	MIN -1.76	MIN 0.38
04-07	MAX 2.21	04-23	MAX 4.13	05-07	MAX 0.40	05-23 MAX 0.95
MIN -1.82	MIN -0.47	MIN -0.47	MIN -0.47	MIN -0.99	MIN -0.99	MIN -0.23
04-08	MAX 2.54	04-24	MAX 3.83	05-08	MAX 0.10	05-24 MAX 0.71
MIN -2.36	MIN -0.55	MIN -0.55	MIN -0.55	MIN -1.35	MIN -1.35	MIN -0.36
04-09	MAX 1.55	04-25	MAX 0.13	05-09	MAX 0.35	05-25 MAX 0.62
MIN -2.12	MIN -1.16	MIN -1.16	MIN -1.16	MIN -0.77	MIN -0.77	MIN -0.36
04-10	MAX 1.17	04-26	MAX 0.46	05-10	MAX 0.60	05-26 MAX -0.17
MIN -0.69	MIN -0.66	MIN -0.66	MIN -0.66	MIN -1.02	MIN -1.02	MIN -0.36
04-11	MAX 0.54	04-27	MAX 0.13	05-11	MAX 0.27	05-27 MAX 0.38
MIN -0.83	MIN -1.46	MIN -1.46	MIN -1.46	MIN -0.66	MIN -0.66	MIN -0.34
04-12	MAX 3.86	04-28	MAX 0.54	05-12	MAX 0.02	05-28 MAX 0.40
MIN -2.14	MIN -0.80	MIN -0.80	MIN -0.80	MIN -0.91	MIN -0.91	MIN -0.36
04-13	MAX 1.06	04-29	MAX 0.71	05-13	MAX 0.05	05-29 MAX 0.13
MIN -0.39	MIN -1.46	MIN -1.46	MIN -1.46	MIN -0.72	MIN -0.72	MIN -0.36
04-14	MAX 1.14	04-30	MAX 0.40	05-14	MAX 0.62	05-30 MAX 0.26
MIN -0.47	MIN -1.79	MIN -1.79	MIN -1.79	MIN -0.61	MIN -0.61	MIN -0.36
04-15	MAX 1.91					05-31 MAX -0.01
MIN -0.72						MIN -0.55
04-16	MAX 0.79					05-16 MAX -0.12
MIN -0.77						MIN -0.50

		1988	1988	1988	1988
06-01	MAX	---	06-17	MAX	07-01
	MIN	---	MIN	MIN	MIN
06-02	MAX	---	06-18	MAX	07-02
	MIN	---	MIN	MIN	MIN
06-03	MAX	---	06-19	MAX	07-03
	MIN	---	MIN	MIN	MIN
06-04	MAX	---	06-20	MAX	07-04
	MIN	---	MIN	MIN	MIN
06-05	MAX	---	06-21	MAX	07-05
	MIN	---	MIN	MIN	MIN
06-06	MAX	---	06-22	MAX	07-06
	MIN	---	MIN	MIN	MIN
06-07	MAX	---	06-23	MAX	07-07
	MIN	---	MIN	MIN	MIN
06-08	MAX	---	06-24	MAX	07-08
	MIN	---	MIN	MIN	MIN
06-09	MAX	---	06-25	MAX	07-09
	MIN	---	MIN	MIN	MIN
06-10	MAX	---	06-26	MAX	07-10
	MIN	---	MIN	MIN	MIN
06-11	MAX	---	06-27	MAX	07-11
	MIN	---	MIN	MIN	MIN
06-12	MAX	---	06-28	MAX	07-12
	MIN	---	MIN	MIN	MIN
06-13	MAX	---	06-29	MAX	07-13
	MIN	---	MIN	MIN	MIN
06-14	MAX	---	06-30	MAX	07-14
	MIN	---	MIN	MIN	MIN
06-15	MAX	---			
	MIN	---			
06-16	MAX	---			
	MIN	---			

TABLE 2A.--LOWER CALCASIEU RIVER AT BURTON LANDING, LOUISIANA, DAILY GAGE HEIGHT DATA, SEPTEMBER 1986 TO JULY 1988

GAGE HEIGHT, FEET, SEPTEMBER 1986					
DAY	MAX	MIN	DAY	MAX	MIN
	SEPTEMBER				
1	---	---	16	6.62	5.66
2	---	---	17	6.82	5.72
3	---	---	18	6.88	6.08
4	---	---	19	6.66	6.08
5	---	---	20	6.78	6.18
6	---	---	21	6.72	5.94
7	---	---	22	6.76	6.02
8	---	---	23	6.84	5.98
9	---	---	24	7.06	6.26
10	6.82	5.96	25	7.36	6.30
11	7.14	5.96	26	7.16	6.02
12	6.84	5.32	27	6.94	5.88
13	6.56	5.32	28	7.06	6.06
14	6.66	5.58	29	7.22	6.22
15	6.78	5.64	30	7.22	6.32

## GAGE HEIGHT, FEET, OCTOBER 1986 TO SEPTEMBER 1987

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	7.16	6.34	6.72	5.66	7.44	6.28	6.74	5.48	6.74	5.52	6.50	5.76
2	7.22	6.42	6.88	5.94	7.12	5.36	7.00	5.30	6.18	5.44	6.54	5.74
3	7.48	6.82	7.10	5.90	6.56	4.88	7.38	5.78	6.08	5.30	6.38	5.96
4	7.08	6.50	7.40	6.42	6.62	5.44	5.74	3.98	6.44	5.42	6.32	5.62
5	6.90	6.10	7.38	5.50	6.60	5.54	6.40	5.02	6.58	5.66	6.72	5.60
6	6.76	5.58	6.68	5.46	6.62	5.68	6.48	5.96	6.12	5.40	6.84	5.78
7	6.66	5.64	7.04	6.02	6.74	5.96	6.50	5.76	5.78	4.22	7.04	6.12
8	6.96	6.00	7.02	5.90	6.70	5.98	6.36	5.26	5.82	3.92	6.62	6.02
9	7.24	5.90	6.84	5.54	6.80	5.86	6.66	5.88	6.00	4.34	6.56	5.46
10	6.62	5.66	6.50	6.04	5.86	5.02	6.20	4.98	6.08	4.86	6.22	5.24
11	7.12	6.08	6.80	5.68	6.38	5.28	5.64	4.26	6.06	4.80	6.10	5.02
12	7.08	6.02	6.36	5.62	6.04	5.06	5.78	4.32	6.06	4.90	6.24	5.22
13	6.62	5.50	5.60	4.40	6.46	4.86	5.98	4.74	5.92	4.78	6.36	5.16
14	6.48	5.52	6.54	5.24	6.54	5.68	6.78	5.26	6.32	5.34	6.58	5.92
15	6.44	5.80	6.78	5.64	6.90	5.72	6.84	5.44	6.90	6.04	6.68	5.94
16	6.52	5.64	6.90	6.06	6.78	5.38	6.70	5.74	5.92	4.86	7.22	6.08
17	6.68	5.90	6.86	5.70	6.58	5.56	7.02	5.88	5.78	4.98	8.22	6.98
18	6.54	5.56	6.84	5.74	6.58	5.48	7.14	6.20	5.58	4.86	7.62	6.68
19	6.62	5.56	6.78	5.44	6.52	5.42	6.18	4.98	6.10	4.94	7.24	6.40
20	6.88	5.98	6.98	5.58	6.58	5.56	6.10	5.66	6.36	5.40	7.24	5.84
21	7.08	6.12	6.38	5.60	6.56	5.64	6.64	5.70	6.26	4.92	7.20	6.26
22	7.28	6.44	7.10	6.08	7.26	6.48	6.60	5.26	6.12	5.24	7.52	6.06
23	7.38	6.70	7.04	5.96	7.64	6.10	6.58	4.78	6.70	4.56	7.66	6.64
24	7.72	5.98	7.12	6.22	6.50	5.80	6.70	5.46	6.80	5.66	7.18	6.28
25	6.46	5.44	7.56	6.28	6.64	6.02	6.48	5.14	6.70	5.64	7.04	5.80
26	6.56	4.86	6.72	5.70	6.68	5.92	6.20	4.48	---	---	7.06	6.04
27	6.66	5.78	6.60	5.88	6.80	5.88	6.34	4.96	7.20	6.50	7.04	6.08
28	6.62	5.72	6.80	6.08	6.82	5.42	6.30	5.00	7.84	6.44	6.90	6.20
29	6.50	5.78	7.06	6.04	6.84	5.62	6.38	5.20	---	---	6.82	5.38
30	6.52	5.88	7.28	6.12	6.78	5.36	6.30	4.98	---	---	5.48	4.02
31	6.74	6.04	---	6.78	5.54	6.36	5.14	---	---	---	5.64	3.70

TABLE 2A.--LOWER CALCASIEU RIVER AT BURTON LANDING, LOUISIANA, DAILY GAGE HEIGHT DATA,  
SEPTEMBER 1986 TO JULY 1988--CONTINUED

DAY	GAGE HEIGHT, FEET, OCTOBER 1986 TO SEPTEMBER 1987						SEPTEMBER							
	APRIL	MAX	MIN	MAY	MAX	MIN	JUNE	MAX	MIN	JULY	MAX	MIN	AUGUST	MAX
1	6.16	4.54	6.14	4.64	6.86	5.80	6.84	5.72	6.02	5.42	6.00	5.20		
2	6.16	4.88	6.52	5.04	6.76	5.80	6.60	5.68	5.96	5.14	6.48	5.24		
3	5.64	4.10	6.70	5.62	6.58	5.58	6.54	5.64	6.04	5.16	6.44	5.18		
4	6.08	4.54	6.56	5.44	6.12	5.34	6.62	5.76	6.20	4.98	6.38	5.22		
5	6.28	4.94	6.28	5.22	6.12	5.20	6.40	5.62	6.34	4.90	6.72	5.22		
6	6.00	4.76	5.92	5.12	6.26	5.62	6.64	5.56	6.38	4.96	6.96	5.48		
7	5.92	4.54	5.94	4.80	6.72	5.86	6.72	5.62	6.44	4.96	6.42	5.50		
8	5.74	4.68	5.84	5.06	7.02	6.10	7.20	5.86	6.68	5.08	6.40	5.38		
9	5.80	4.62	6.06	5.28	7.24	6.08	6.84	5.78	6.72	5.34	6.20	5.26		
10	6.02	5.04	5.92	5.20	7.34	5.86	6.92	5.64	7.04	6.02	5.98	5.36		
11	6.12	5.30	6.10	5.12	7.40	5.90	6.96	5.70	6.28	5.60	6.04	5.26		
12	6.42	5.78	6.24	5.14	7.16	5.94	6.74	5.72	6.04	5.26	5.84	5.08		
13	7.00	5.80	6.38	5.14	7.08	5.76	6.58	5.60	6.02	5.36	6.00	4.82		
14	6.22	5.26	6.34	4.98	6.66	5.38	6.30	4.52	6.06	5.12	6.10	5.14		
15	5.98	4.76	6.14	4.82	6.66	5.44	6.18	3.64	6.06	4.60	6.14	5.18		
16	5.72	4.56	6.10	4.44	6.52	5.48	6.12	3.30	6.26	5.02	6.58	4.70		
17	6.30	4.58	6.42	4.72	6.60	5.58	6.18	5.48	6.16	4.84	6.42	4.72		
18	6.22	4.88	6.36	4.98	6.38	5.76	6.44	5.44	6.14	4.84	6.50	5.10		
19	6.22	4.84	6.40	4.96	6.36	5.76	6.34	5.48	5.94	4.86	5.98	4.74		
20	6.24	4.78	6.38	5.42	6.54	5.80	6.74	5.70	6.00	4.92	6.24	4.54		
21	6.00	4.70	6.34	5.58	6.70	5.58	6.46	4.18	6.06	4.78	6.56	5.30		
22	5.56	4.18	6.14	5.38	6.58	5.60	6.52	5.46	5.98	4.88	6.02	5.66		
23	5.60	4.58	6.20	5.26	6.64	5.50	6.72	5.40	6.20	4.76	6.40	5.36		
24	5.68	4.68	6.30	5.42	6.60	5.34	7.06	5.64	6.32	5.06	6.40	5.66		
25	5.58	4.80	6.70	5.50	6.26	5.30	6.90	5.76	6.34	5.42	6.40	5.56		
26	5.62	4.84	7.04	5.46	6.22	4.90	6.90	5.66	6.24	5.60	6.48	5.56		
27	5.74	4.64	7.32	5.96	6.14	4.70	6.46	5.52	6.02	5.52	6.54	5.68		
28	5.64	4.54	7.42	6.14	6.58	5.12	6.26	5.40	6.06	5.30	6.88	5.14		
29	5.82	4.28	7.30	6.32	6.78	5.64	6.16	5.44	5.84	5.18	5.98	4.76		
30	5.88	4.60	6.94	5.98	6.88	5.66	6.12	5.40	5.86	5.10	6.04	4.74		
31	--	--	6.88	5.70	--	--	5.96	5.42	6.14	4.78	--	--		

## GAGE HEIGHT, FEET, OCTOBER 1987 TO JULY 1988

DAY	MAX	MIN	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH
1	6.22	5.18	6.36	5.58	7.72	6.12	4.76	6.24
2	6.46	5.22	6.28	5.62	7.74	6.06	4.48	5.66
3	6.10	4.54	6.38	5.48	7.72	6.34	5.50	6.82
4	6.22	4.54	6.56	5.40	6.18	4.74	6.10	5.96
5	6.32	5.32	6.38	5.32	6.76	5.08	4.96	5.06
6	6.00	5.20	6.52	5.18	7.28	5.84	6.86	5.28
7	5.94	4.70	6.82	5.70	7.22	5.78	6.92	5.36
8	6.18	4.88	6.98	5.70	6.70	5.70	5.90	4.92
9	6.50	5.42	7.20	5.72	6.88	5.62	6.12	5.52
10	6.34	5.06	6.18	3.86	6.70	5.72	5.86	5.28
11	6.30	4.98	5.38	4.40	6.54	5.64	6.26	5.32
12	5.84	4.48	5.94	4.94	6.46	5.52	6.22	5.56
13	6.16	4.98	5.96	4.74	6.74	6.08	5.80	6.00
14	6.26	5.30	6.10	5.58	6.90	6.32	6.32	6.62
15	6.48	5.40	7.40	5.98	6.26	4.80	6.38	5.18
16	6.38	5.50	8.06	6.98	5.78	4.46	6.96	5.38
17	6.34	5.06	7.02	6.02	---	---	6.92	5.64
18	5.96	5.20	6.94	5.84	6.66	5.14	6.84	5.34
19	6.18	5.20	6.86	6.00	6.82	5.66	7.16	6.06
20	6.18	5.50	7.72	5.52	6.48	5.16	7.04	5.38
21	5.74	4.28	7.72	7.72	6.56	5.10	5.90	4.96
22	6.58	5.58	7.72	7.70	6.68	5.30	5.94	4.94
23	6.68	5.78	7.72	7.70	6.72	5.74	5.92	5.26
24	6.86	6.04	7.72	7.70	6.86	6.00	6.26	5.40
25	6.88	5.26	7.72	7.70	6.86	6.06	5.28	4.14
26	6.82	5.70	7.72	7.70	6.78	5.94	5.52	3.84
27	6.52	4.78	7.72	7.72	6.48	5.54	5.56	3.90
28	6.24	5.10	7.74	7.72	5.76	4.86	5.88	4.38
29	6.56	5.02	7.74	7.72	5.48	3.74	6.30	4.82
30	6.54	5.26	7.72	7.70	6.48	4.96	6.58	5.54
31	6.48	5.44	---	---	6.50	5.56	6.62	5.42

TABLE 2A.--LOWER CALCASIEU RIVER AT BURTON LANDING, LOUISIANA, DAILY GAGE HEIGHT DATA, SEPTEMBER 1986 TO JULY 1988--CONTINUED

GAGE HEIGHT, FEET, OCTOBER 1987 TO SEPTEMBER 1988

DAY	APRIL			MAY			JUNE			JULY		
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	---	---	6.92	5.10	6.72	5.58	6.48	5.14	6.48	5.10	6.32	5.10
2	---	---	7.08	5.76	6.58	5.24	6.32	5.16	6.20	5.16	6.22	5.24
3	---	---	7.04	5.92	6.50	5.16	6.20	5.18	6.22	5.32	6.28	5.32
4	---	---	6.26	3.36	6.80	5.06	6.22	5.28	6.18	5.32	6.24	5.32
5	---	---	6.20	4.48	6.32	5.28	6.18	5.28	6.18	5.32	6.24	5.32
6	6.00	5.26	6.36	4.84	6.42	5.26	6.38	5.82	6.38	5.82	6.80	5.92
7	6.28	4.94	6.84	5.64	6.12	5.32	6.80	6.00	6.86	6.00	6.46	6.00
8	6.20	5.08	6.60	5.66	6.24	5.46	6.86	6.04	6.94	6.04	6.30	5.88
9	5.82	4.78	6.26	5.18	6.18	5.18	6.68	7.16	6.68	7.16	6.68	5.68
10	5.82	4.78	6.26	5.18	6.18	5.18	6.68	7.16	6.68	7.16	6.68	5.68
11	4.94	3.56	6.12	5.24	6.16	4.76	6.82	5.66	6.82	5.66	6.92	5.64
12	4.46	3.54	6.02	5.22	6.42	5.06	6.92	5.64	6.92	5.64	6.76	5.72
13	5.40	4.14	6.28	5.02	6.78	5.16	6.76	5.54	6.76	5.54	6.76	5.56
14	5.60	4.84	6.04	4.84	6.78	5.64	6.76	5.52	6.76	5.52	6.76	5.56
15	5.82	4.84	6.04	4.74	6.60	5.52	6.60	5.52	6.60	5.52	6.60	5.52
16	6.12	4.94	6.06	4.74	6.46	5.22	5.92	5.64	5.92	5.64	5.92	5.64
17	7.00	5.32	6.00	4.66	6.26	5.16	6.26	5.16	6.26	5.16	6.26	5.16
18	6.78	5.88	5.86	4.56	6.08	4.98	6.08	4.98	6.08	4.98	6.08	4.98
19	5.96	5.02	6.16	4.52	6.12	5.08	6.12	5.08	6.12	5.08	6.12	5.08
20	7.18	4.80	6.26	4.86	6.28	5.20	6.28	5.20	6.28	5.20	6.28	5.20
21	6.70	5.34	6.52	5.20	6.24	5.60	6.24	5.60	6.24	5.60	6.24	5.60
22	6.62	5.68	6.56	5.48	6.42	5.74	6.42	5.74	6.42	5.74	6.42	5.74
23	6.52	5.44	5.78	5.26	6.20	5.74	6.20	5.74	6.20	5.74	6.20	5.74
24	6.30	4.92	5.78	5.02	6.74	5.90	6.74	5.90	6.74	5.90	6.74	5.90
25	6.32	5.40	5.60	4.88	7.30	5.76	7.30	5.76	7.30	5.76	7.30	5.76
26	6.14	4.98	6.10	5.12	6.56	5.26	6.56	5.26	6.56	5.26	6.56	5.26
27	5.80	4.98	6.32	5.42	6.40	5.06	6.40	5.06	6.40	5.06	6.40	5.06
28	6.44	5.30	6.52	5.44	6.26	4.96	6.26	4.96	6.26	4.96	6.26	4.96
29	7.28	6.06	6.72	5.58	6.44	4.86	6.44	4.86	6.44	4.86	6.44	4.86
30	7.34	6.22	6.92	5.66	6.54	5.04	6.54	5.04	6.54	5.04	6.54	5.04
31	---	---	6.90	5.64	---	---	6.90	5.64	6.90	5.64	6.90	5.64

TABLE 2B.--LOWER CALCASIEU RIVER AT BURTON LANDING, LOUISIANA, DAILY WATER TEMPERATURE DATA,  
SEPTEMBER 1986 TO JULY 1988

WATER TEMPERATURE, DEGREES CELSIUS, SEPTEMBER 1986

DAY	MAX	MIN	DAY	MAX	MIN
			SEPTEMBER		
1	---	---	16	30.3	29.6
2	---	---	17	30.4	29.0
3	---	---	18	30.4	29.4
4	---	---	19	29.8	29.0
5	---	---	20	29.3	28.6
6	---	---	21	29.4	28.5
7	---	---	22	28.8	28.1
8	---	---	23	29.7	27.6
9	---	---	24	29.4	28.5
10	29.9	25.2	25	29.2	28.5
11	29.6	25.4	26	29.6	28.5
12	30.1	25.5	27	30.5	28.8
13	30.7	29.3	28	29.8	29.2
14	30.7	28.5	29	29.6	28.9
15	30.2	29.3	30	29.4	29.0

TABLE 2B.--LOWER CALCASIEU RIVER AT BURTON LANDING, LOUISIANA, DAILY WATER TEMPERATURE DATA,  
SEPTEMBER 1986 TO JULY 1988--CONTINUED

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	
1	29.4	28.8	29.1	22.2	21.5	21.1	14.6	14.2	14.4	14.0	12.6	15.4	14.6	14.8	15.8	15.3	15.2	
2	---	---	22.2	21.8	14.7	14.2	---	---	---	15.0	13.5	15.8	14.8	14.8	14.8	14.8	14.8	
3	29.1	25.0	22.4	21.3	14.4	13.7	---	---	---	15.2	14.1	16.3	15.2	15.2	15.3	15.3	15.3	
4	29.7	28.5	22.2	21.4	14.1	13.3	---	---	---	15.0	14.3	16.6	15.3	15.3	15.3	15.3	15.3	
5	30.2	25.2	22.2	20.5	13.5	12.9	---	---	---	15.5	14.0	16.6	15.3	15.3	15.3	15.3	15.3	
6	29.5	25.0	21.2	19.5	13.4	12.5	---	---	---	14.8	14.2	16.9	15.4	15.4	15.4	15.4	15.4	
7	28.0	27.0	21.3	19.7	13.4	12.8	11.3	10.7	10.5	14.5	13.5	16.2	15.7	15.7	15.7	15.7	15.7	
8	26.6	25.9	22.7	21.4	---	---	11.4	11.1	11.1	14.8	13.4	16.1	15.4	15.4	15.4	15.4	15.4	
9	26.4	25.2	23.4	22.2	---	---	12.0	11.1	11.1	14.5	12.8	---	---	---	---	---	---	
10	26.4	25.1	22.7	21.8	---	---	11.6	10.6	10.6	14.2	12.6	16.4	15.7	15.7	15.7	15.7	15.7	
11	26.3	25.0	22.2	20.6	18.8	16.1	10.6	9.8	9.8	14.7	13.5	15.7	14.6	14.6	14.6	14.6	14.6	
12	25.9	25.0	20.5	18.9	16.7	15.8	10.5	9.4	9.4	16.2	14.2	15.6	13.9	13.9	13.9	13.9	13.9	
13	25.4	22.4	18.9	15.7	16.4	14.3	10.6	10.1	10.1	16.7	15.1	15.4	14.0	14.0	14.0	14.0	14.0	
14	23.2	20.7	16.6	14.8	14.8	13.9	11.3	10.4	10.4	17.1	15.7	16.0	14.5	14.5	14.5	14.5	14.5	
15	23.0	21.7	15.8	14.6	14.4	13.7	11.8	11.2	11.2	17.6	16.9	17.2	15.5	15.5	15.5	15.5	15.5	
16	22.3	21.0	16.7	15.3	15.8	14.1	12.5	11.7	11.7	17.0	15.7	18.6	16.3	16.3	16.3	16.3	16.3	
17	22.7	21.3	18.2	16.6	15.1	14.0	12.5	12.0	12.0	15.5	14.2	18.5	17.9	17.9	17.9	17.9	17.9	
18	23.0	21.4	19.3	17.7	15.5	13.7	12.1	11.5	11.5	14.8	13.4	18.0	17.3	17.3	17.3	17.3	17.3	
19	22.8	21.3	19.9	18.6	13.6	12.0	11.5	11.1	11.1	14.1	12.5	18.8	17.1	17.1	17.1	17.1	17.1	
20	22.4	21.0	20.8	18.8	12.4	11.7	11.0	10.4	10.4	13.3	12.4	19.9	17.8	17.8	17.8	17.8	17.8	
21	22.0	20.9	20.0	19.2	11.8	10.8	10.3	9.2	9.2	13.0	12.4	19.3	18.3	18.3	18.3	18.3	18.3	
22	21.7	20.6	20.1	18.7	10.7	9.9	8.4	8.4	8.4	13.3	12.3	20.3	18.8	18.8	18.8	18.8	18.8	
23	21.4	21.2	20.6	19.8	11.6	7.9	8.9	8.0	8.0	13.2	12.5	20.1	19.3	19.3	19.3	19.3	19.3	
24	21.6	21.0	20.4	19.4	10.7	7.4	9.1	8.3	8.3	12.8	12.2	19.1	18.1	18.1	18.1	18.1	18.1	
25	22.1	20.8	19.5	18.6	10.0	8.7	9.2	8.6	8.6	12.6	12.1	19.1	18.1	18.1	18.1	18.1	18.1	
26	22.3	20.9	18.5	17.4	9.5	8.9	8.6	8.6	8.6	13.0	12.5	19.1	18.1	18.1	18.1	18.1	18.1	
27	22.5	21.1	17.4	16.2	9.8	8.7	9.6	8.7	8.7	13.7	12.6	19.1	18.2	18.2	18.2	18.2	18.2	
28	22.2	21.0	16.2	15.1	---	---	10.8	9.5	9.5	14.8	13.6	19.8	18.2	18.2	18.2	18.2	18.2	
29	22.6	21.0	15.1	14.6	---	---	12.8	10.4	10.4	---	---	19.5	17.2	17.2	17.2	17.2	17.2	
30	22.4	21.1	14.8	14.4	---	---	13.5	12.2	12.2	---	---	16.8	15.2	15.2	15.2	15.2	15.2	
31	22.6	21.3	---	---	---	---	13.9	11.6	11.6	---	---	15.6	13.2	13.2	13.2	13.2	13.2	

## WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
			MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	16.5	13.0	24.4	23.8	28.4	27.4	28.3	27.0	32.4	30.6	29.5	28.1		
2	16.9	15.2	24.9	23.8	28.7	27.8	27.3	26.4	32.6	30.6	29.4	28.0		
3	16.7	14.6	24.7	23.9	29.1	28.1	27.6	26.3	32.4	31.2	29.7	27.8		
4	17.0	14.7	23.8	23.1	28.8	27.8	27.6	26.7	32.1	31.2	29.9	28.1		
5	15.9	14.9	24.3	23.5	28.5	26.9	28.7	27.4	32.3	31.1	29.9	28.6		
6	15.9	15.2	24.1	23.6	28.9	26.6	28.8	27.7	32.2	30.8	29.7	28.9		
7	---	---	23.6	23.1	---	---	28.5	27.5	31.8	31.0	29.8	28.9		
8	---	---	24.3	23.1	---	---	28.0	27.5	31.8	30.7	30.6	29.0		
9	17.3	16.3	24.6	23.3	---	---	27.9	27.2	31.6	30.3	30.2	29.1		
10	18.6	16.7	24.8	23.6	---	---	28.9	27.3	30.7	29.7	29.9	28.9		
11	19.0	18.0	25.4	24.2	---	---	29.6	27.8	30.6	29.5	29.7	28.9		
12	20.8	18.9	25.9	25.0	---	---	30.5	28.2	30.8	29.4	30.1	28.6		
13	21.3	20.0	26.5	24.6	---	---	30.3	28.7	31.1	29.6	29.8	28.4		
14	20.6	19.5	27.0	25.3	---	---	30.2	28.8	31.5	30.0	30.4	28.4		
15	20.1	19.1	27.8	26.0	---	---	30.0	28.7	31.9	30.2	30.2	29.3		
16	20.7	19.3	27.1	25.8	---	---	29.9	28.8	32.0	30.9	29.9	28.0		
17	21.2	19.9	27.1	26.2	27.7	26.6	30.4	28.6	32.3	30.9	29.1	27.9		
18	21.8	20.5	27.6	26.5	27.0	26.5	31.3	29.6	32.2	31.1	29.4	28.7		
19	22.2	21.2	27.4	26.9	27.3	26.4	31.2	29.7	33.0	31.1	29.7	28.4		
20	22.5	21.7	27.6	26.9	27.9	26.7	30.1	29.0	32.9	31.2	29.1	27.6		
21	23.4	22.1	28.5	27.1	28.2	27.0	30.2	28.6	33.5	31.6	28.3	26.9		
22	23.2	22.0	29.0	27.4	28.8	27.3	30.9	29.4	32.9	31.3	27.9	26.9		
23	23.8	21.8	28.3	27.5	29.4	27.7	30.7	29.8	32.7	31.6	27.1	25.7		
24	23.8	21.7	28.9	27.6	29.8	28.2	31.0	29.7	32.3	31.4	28.2	25.8		
25	23.4	21.1	28.3	27.8	29.2	27.9	31.7	30.2	32.1	31.1	27.5	26.0		
26	23.6	21.5	28.3	27.6	29.9	28.3	31.4	29.8	31.9	31.1	27.3	26.1		
27	24.1	22.0	28.2	27.4	29.7	28.2	31.2	29.5	32.1	30.8	26.7	25.7		
28	24.8	22.7	28.3	27.2	29.7	28.0	31.1	29.9	33.0	30.8	26.3	25.7		
29	24.6	23.5	28.1	27.3	29.7	28.2	31.8	30.4	31.7	30.4	26.2	25.5		
30	24.7	23.5	29.4	27.3	29.3	28.1	32.1	30.3	31.1	29.5	25.9	24.7		
31	---	---	28.2	27.5	---	---	32.4	30.6	30.4	28.7	28.7	---		

TABLE 2B.--LOWER CALCASIEU RIVER AT BURTON LANDING, LOUISIANA, DAILY WATER TEMPERATURE DATA,  
SEPTEMBER 1986 TO JULY 1988--CONTINUED

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	
1	---	---	21.8	20.5	14.4	13.8	14.0	12.5	14.9	13.7	16.9	15.4	---	---	---	---	---	
2	---	---	21.7	20.8	14.2	13.4	12.5	10.8	15.0	13.9	13.9	16.2	---	---	---	---	---	
3	---	---	21.9	21.0	14.7	13.7	11.3	10.4	16.1	15.1	17.7	16.2	---	---	---	---	---	
4	---	---	22.0	21.1	15.1	14.3	10.7	9.4	16.3	15.0	16.7	15.1	16.5	15.0	16.5	15.1	15.0	
5	---	---	22.0	20.9	15.0	14.1	9.9	9.1	14.9	13.5	16.5	15.0	16.5	15.0	16.5	15.0	15.0	
6	---	---	20.8	19.1	15.5	14.4	9.3	8.2	13.4	12.2	17.3	15.5	---	---	---	---	---	
7	---	---	20.5	18.7	15.5	14.9	8.9	7.6	12.1	10.7	17.2	16.1	---	---	---	---	---	
8	---	---	20.5	19.5	15.0	14.5	7.7	6.8	10.6	9.7	17.3	17.0	---	---	---	---	---	
9	---	---	20.4	19.9	15.1	14.4	7.5	6.7	10.6	9.3	17.5	16.6	---	---	---	---	---	
10	---	---	19.9	17.8	15.3	14.4	7.0	6.1	9.9	9.5	17.4	16.3	---	---	---	---	---	
11	---	---	17.8	16.8	16.0	14.9	7.1	5.7	9.9	8.7	17.4	16.7	---	---	---	---	---	
12	---	---	17.3	15.8	16.1	15.4	7.4	6.4	8.9	7.8	18.3	17.3	---	---	---	---	---	
13	---	---	17.5	15.8	16.3	15.2	8.2	7.2	9.9	8.5	17.9	16.8	---	---	---	---	---	
14	---	---	17.3	15.9	17.2	16.0	7.2	6.1	10.5	9.7	16.6	15.3	---	---	---	---	---	
15	---	---	17.9	16.9	16.5	14.3	7.7	6.3	11.4	10.3	16.5	14.9	---	---	---	---	---	
16	---	---	19.2	17.4	14.2	13.3	8.3	7.2	11.0	9.9	15.9	14.9	---	---	---	---	---	
17	---	---	19.3	18.4	13.8	12.1	9.7	7.9	12.1	10.9	15.5	14.9	---	---	---	---	---	
18	---	---	18.4	17.6	13.3	12.2	10.6	9.3	12.5	11.6	15.1	13.5	---	---	---	---	---	
19	---	---	17.5	16.7	13.9	13.0	12.4	10.0	12.5	11.8	14.8	13.5	---	---	---	---	---	
20	---	---	16.8	16.2	14.7	13.9	11.9	10.6	13.1	11.6	15.2	13.2	---	---	---	---	---	
21	---	---	16.2	15.6	14.4	13.8	10.8	10.0	13.3	12.2	15.5	13.4	---	---	---	---	---	
22	---	---	15.8	15.2	14.0	13.7	10.9	9.3	14.0	12.8	15.9	15.0	---	---	---	---	---	
23	---	---	16.2	15.4	14.5	13.6	10.8	9.5	14.9	13.6	16.4	15.4	---	---	---	---	---	
24	---	---	16.7	15.8	16.1	14.5	11.6	10.5	14.5	13.6	16.8	16.1	---	---	---	---	---	
25	---	---	17.0	16.2	17.4	15.9	10.9	10.1	14.5	13.0	18.0	16.5	---	---	---	---	---	
26	---	---	16.4	15.9	17.5	16.9	10.4	9.3	14.5	13.6	20.1	17.7	---	---	---	---	---	
27	---	---	16.0	15.3	17.4	15.7	10.4	9.5	15.1	14.2	19.4	18.0	---	---	---	---	---	
28	21.2	19.7	15.4	14.8	15.6	14.7	10.8	9.9	15.4	14.5	19.9	18.5	---	---	---	---	---	
29	20.8	19.5	15.1	14.6	14.6	13.5	11.4	10.3	15.6	14.9	20.6	19.5	---	---	---	---	---	
30	21.1	19.7	14.9	14.2	13.4	12.9	12.8	11.2	12.4	11.2	19.7	18.3	---	---	---	---	---	
31	21.5	20.1	---	---	---	14.0	13.0	14.0	12.4	12.4	18.9	18.2	---	---	---	---	---	

## WATER TEMPERATURE, DEGREES CELSIUS, OCTOBER 1987 TO JULY 1988

DAY	APRIL			MAY			JUNE			JULY		
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	19.1	18.3	22.5	20.5	27.0	26.0	30.6	29.6				
2	19.7	18.9	22.7	21.4	27.3	26.4	31.3	29.9				
3	20.4	18.8	23.1	22.0	27.0	26.4	31.4	30.0				
4	20.2	19.2	24.5	23.0	26.5	25.7	30.6	29.9				
5	20.6	19.9	25.2	23.2	26.8	25.1	30.0	29.1				
6	20.9	20.1	24.7	23.4	27.5	25.4	29.2	28.1				
7	21.3	19.8	24.0	23.4	28.5	26.0	28.9	27.6				
8	21.0	20.0	23.6	23.3	28.2	26.4	28.5	27.1				
9	21.6	20.1	23.9	23.3	28.4	27.1	28.4	26.9				
10	20.9	19.4	25.6	23.7	28.4	27.3	29.0	27.4				
11	19.1	17.6	26.3	24.7	28.2	25.9	29.7	28.2				
12	18.7	17.1	25.7	24.4	28.6	26.6	29.6	28.7				
13	19.4	17.9	25.9	24.1	28.1	26.6	29.7	28.9				
14	20.0	18.7	26.5	24.8	28.3	26.8	30.6	29.3				
15	21.0	18.9	26.2	25.1	28.6	27.4						
16	21.5	19.7	26.5	25.4	28.3	27.5						
17	21.7	20.4	26.9	25.7	28.7	27.7						
18	22.0	21.1	27.7	25.8	29.2	27.8						
19	22.4	20.7	27.0	26.2	28.9	28.1						
20	21.7	20.5	26.7	26.2	29.2	27.7						
21	21.6	21.1	26.9	25.9	29.2	28.2						
22	22.7	21.6	26.3	25.3	29.9	28.2						
23	23.7	22.3	25.6	24.4	30.1	28.1						
24	24.9	22.8	26.2	24.6	29.0	27.7						
25	24.9	23.3	26.2	24.5	28.9	27.7						
26	24.1	22.7	25.9	23.9	29.2	28.3						
27	25.0	22.9	25.6	23.9	30.7	28.6						
28	23.6	22.0	25.5	24.6	30.7	29.2						
29	23.2	21.1	26.2	25.1	30.5	29.5						
30	21.9	20.2	26.3	25.5	---	---						
31	---	---	26.8	25.5	---	---						

TABLE 2C.--LOWER CALCASIEU RIVER AT BURTON LANDING, LOUISIANA, DAILY SPECIFIC CONDUCTANCE DATA,  
SEPTEMBER 1986 TO JULY 1988

SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, SEPTEMBER 1986

DAY	MAX	MIN	SEPTEMBER		
			DAY	MAX	MIN
1	---	---	16	28800	26500
2	---	---	17	28700	24900
3	---	---	18	29000	27000
4	---	---	19	28500	26600
5	---	---	20	28300	26600
6	---	---	21	28100	26300
7	---	---	22	28300	26000
8	---	---	23	28100	25200
9	---	---	24	28600	27100
10	30700	28600	25	28800	27500
11	31000	22100	26	29900	27100
12	30200	22000	27	29600	24800
13	28900	25200	28	28100	25000
14	29100	24300	29	29100	24700
15	29100	26100	30	29000	26200

## SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1986 TO SEPTEMBER 1987

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY			FEBRUARY			MARCH		
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	30100	26200	24900	18500	4000	1600	---	---	---	7200	3800	2500	700	700	2500	700	700	
2	---	---	28400	21200	3000	1500	---	---	---	7000	3500	700	500	500	3500	700	500	
3	30100	26900	28800	23000	2200	1000	---	---	---	4800	1600	600	400	400	1600	600	400	
4	29000	25700	28100	24700	5400	1500	---	---	---	8400	3100	600	400	400	3100	600	400	
5	27000	22700	28300	20400	4500	2500	---	---	---	12200	5900	2500	300	300	5900	2500	300	
6	25500	22600	25800	18400	4700	3000	---	---	---	12300	7100	4000	900	900	7100	4000	900	
7	26600	22300	24200	18400	6500	4000	---	---	---	13800	7900	3600	1300	1300	7900	3600	1300	
8	28700	22900	22600	16800	---	---	---	---	---	13900	9200	4800	2400	2400	9200	4800	2400	
9	28800	24200	19000	16300	6700	5100	---	---	---	16900	11700	---	---	---	11700	---	---	
10	26400	24200	19200	15500	6100	4800	15000	4100	20400	20400	12900	---	---	12900	---	---	9100	
11	30400	25100	19900	15900	10500	6000	17100	4700	19500	14300	14300	---	9700	9700	14300	---	9700	
12	31100	26800	18300	15500	11200	7200	8700	2300	19000	12900	12900	10300	9100	9100	12900	10300	9100	
13	30500	25100	17600	16700	12500	6300	---	---	---	18800	11100	10000	8900	8900	11100	10000	8900	
14	28100	22600	21300	16000	13500	9400	---	---	---	19300	14100	10100	9000	9000	14100	10100	9000	
15	27900	24900	22100	17100	14500	8000	---	---	---	20400	17300	9800	8900	8900	17300	9800	8900	
16	27000	23700	24000	17300	11500	7100	---	---	---	17700	12700	9800	8900	8900	12700	9800	8900	
17	27200	22400	21700	16100	8900	5500	---	---	---	12600	9300	9800	9400	9400	9300	9800	9400	
18	27900	20700	21000	14200	6000	4500	---	---	---	10200	7800	9900	8900	8900	7800	9900	8900	
19	26500	22900	21200	15300	8800	4200	---	---	---	21000	7300	9800	8800	8800	7300	9800	8800	
20	29500	23800	21400	17400	4800	3300	31900	9200	15300	11600	11600	9700	8900	8900	11600	9700	8900	
21	30800	24700	21800	15400	4900	2900	9100	2000	20200	14200	14200	---	8800	8800	14200	---	8800	
22	31000	26500	25000	19400	5000	3000	5900	1200	20300	13800	13800	---	9000	9000	13800	---	9000	
23	31500	27400	23000	17600	7100	3900	---	---	---	14800	10800	9900	9400	9400	10800	9900	9400	
24	30400	26600	20800	11800	4900	2000	1000	200	14000	10600	10600	---	---	10600	---	---	---	
25	27900	23200	14700	10700	2200	1600	1300	700	12800	10300	10300	7600	6900	7600	10300	7600	6900	
26	25600	22100	10300	4000	1700	1300	1500	800	21500	7900	7900	6800	6800	7900	7900	6800	6800	
27	25200	20200	3900	1600	2400	1100	2800	1400	7800	4300	4300	6800	6800	7500	4300	6800	6800	
28	24200	19000	2700	1200	3500	1500	3400	1800	6000	2900	2900	6800	6800	7700	2900	7700	6800	
29	22500	17400	2500	1100	---	---	4400	2000	---	---	---	7300	7300	7700	---	7700	7300	
30	22200	16200	3600	1300	4600	2500	5000	2800	---	---	7800	7800	7400	7400	5000	7800	7400	7400
31	24700	20400	---	---	4800	2600	5300	2800	---	---	7900	7900	7100	7100	2800	7900	7100	7100

TABLE 2C.--LOWER CALCASIEU RIVER AT BURTON LANDING, LOUISIANA, DAILY SPECIFIC CONDUCTANCE DATA,  
SEPTEMBER 1986 TO JULY 1988--CONTINUED

SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1986 TO SEPTEMBER 1987

DAY	APRIL			MAY			JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN										
1	7700	6800	27500	18500	19200	13100	10600	6900	12900	11000	31100	21300						
2	7700	6700	27100	22000	18500	12500	6500	3900	13400	9000	30900	25200						
3	7800	7200	26300	23000	14900	11200	4100	2700	14000	10700	31100	25800						
4	7700	7100	27900	24100	12200	10400	2900	2000	15700	10100	32400	26500						
5	7600	7100	27500	24400	14500	10400	2500	1700	20000	11000	32700	27800						
6	7600	6800	27400	23000	15500	11100	3800	1700	20900	11900	33100	29000						
7	---	---	25800	20300	19300	11300	4400	2500	20000	12100	33000	29000						
8	8	---	26000	22200	20600	12700	5000	3200	22100	14000	31700	26400						
9	16800	7800	26600	22300	20800	11400	7000	3600	20700	17300	31600	25800						
10	15000	7000	26900	22200	21000	10300	5200	3800	23100	16200	29900	26000						
11	12300	6300	26100	20400	20400	11100	5300	3800	20400	16800	29700	26100						
12	14300	10000	24900	19100	19200	12000	5600	4300	18700	14300	29900	26300						
13	14100	10600	23800	18400	14100	11200	5400	3800	16800	13200	29800	22700						
14	14100	6700	24100	18500	14200	10600	5600	3900	15700	8500	30200	24700						
15	14600	6500	22500	18200	12400	---	4600	3300	14400	8900	30300	25300						
16	19200	5400	21900	17000	---	---	---	3800	2800	13900	8600	29300	25400					
17	19800	9300	21600	16000	7300	5800	3700	2800	14000	9100	28800	26200						
18	19400	9300	19700	14800	6600	3800	4900	3000	18100	8500	27900	24700						
19	16000	7400	17600	13000	3700	3100	7600	4500	16600	10500	26200	21900						
20	16500	9200	17900	9900	2900	2200	10100	6500	19200	12500	24100	20900						
21	18700	10800	17600	13500	2600	2000	11400	6800	21200	12600	27700	20500						
22	21100	13400	16000	12100	3200	2200	14200	9400	24000	15700	28200	20400						
23	22600	17100	18200	12700	5500	2100	13500	10100	25200	15100	30300	22000						
24	23200	19300	20100	14200	4700	3400	15900	11800	29700	18700	30200	23400						
25	26500	19100	20700	15800	5700	3100	16200	11900	28300	22200	30800	26200						
26	28100	19200	22800	16200	6100	3200	14800	12100	27900	22300	30000	25500						
27	26400	19300	22800	19700	7400	4400	16400	10700	27800	22900	30100	26700						
28	26500	19900	24100	18800	14600	4700	14400	10000	26800	23600	30800	26400						
29	27400	16800	21700	16000	18300	7100	14300	10400	28900	23500	31200	27400						
30	29600	20800	19600	13100	16300	10000	14100	10700	28100	24300	29200	27100						
31	--	--	19400	14600	--	--	13200	11000	27800	23300	--	--						

## SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1987 TO JULY 1988

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	31900	26500	28500	23100	7700	6100	12800	10300	17500	10300	9700	7500
2	32600	27200	26200	21800	9300	6500	12500	10400	10900	7800	---	---
3	31800	26000	27800	23000	11200	7900	18200	10800	7800	6000	12600	9900
4	30500	25000	31300	25200	11300	7200	17200	10300	6300	5300	10900	8800
5	32500	27000	32400	27600	14700	7800	13800	10100	6300	5000	8500	7300
6	31700	27700	36700	27500	18200	9900	21800	11000	5500	4800	8500	7500
7	31300	28100	35800	31500	16200	9900	17600	11600	6700	4900	7700	5900
8	32400	27100	35600	31200	11900	8500	12700	10500	6200	5100	8200	6300
9	32400	30900	34500	30800	10300	8300	12100	10100	6800	5300	7700	5800
10	32000	30400	32800	28900	15000	8200	11500	8700	6800	5600	6000	4900
11	32400	29100	30700	27600	10800	7400	13500	8400	8900	6400	5000	4200
12	32000	28500	33500	27900	10700	7400	12300	9800	9500	6300	4200	3500
13	31700	29900	33100	27100	12000	7600	13600	10800	9500	7100	4700	3500
14	33800	29700	32200	28500	14200	8800	17700	9900	10400	7600	5600	4300
15	34000	29700	36000	29900	11200	8300	17300	12400	11200	8700	6200	4500
16	33900	31300	34300	21800	14400	9200	17600	12400	11100	8400	6700	5400
17	33700	31900	21400	11200	19400	10100	19400	14000	13400	9700	7600	6000
18	32800	28900	10900	7800	21100	12800	15300	11000	13500	9900	7000	5800
19	32300	27900	9100	6600	25200	15800	15100	11500	11300	8700	7100	5900
20	32500	30900	7800	6000	20500	14800	14800	11400	9200	7500	8700	6000
21	33800	30600	8600	5700	19100	13600	12300	10800	8400	6100	8400	5600
22	35200	31900	8000	5100	20200	14200	12300	8400	7200	5100	6400	4300
23	35000	33000	6700	4900	15400	12100	10500	8900	7100	5800	6200	5100
24	35800	32200	8100	5400	13500	9700	12100	8000	8100	5700	6600	5900
25	35500	31900	7900	6100	13500	8700	11200	9400	9300	6600	6400	5400
26	34700	31500	8000	6000	10500	7800	10800	8600	9100	6600	6300	5200
27	32700	28000	8400	6300	8600	6900	13900	8300	8900	6900	7700	5800
28	31400	25600	7500	5700	7300	6100	14700	9700	8900	6900	9200	7100
29	31400	26500	8500	5700	7800	6600	16400	11300	10000	7600	9500	8000
30	30500	26000	8300	6700	11500	7400	19900	14800	14000	---	9500	8100
31	29400	24600	---	---	15300	10500	18600	14000	---	---	11300	8600

TABLE 2C.--LOWER CALCASIEU RIVER AT BURTON LANDING, LOUISIANA, DAILY SPECIFIC CONDUCTANCE DATA, SEPTEMBER 1986 TO JULY 1988--CONTINUED

SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, OCTOBER 1987 TO JULY 1988

DAY	APRIL			MAY			JUNE			JULY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9200	8000	31100	24400	38400	29800	33900	27900				
2	8800	6500	31800	24400	37500	32400	34100	28500				
3	7000	5900	30400	28400	37300	33500	32200	26800				
4	6200	5100	29300	27100	35200	31600	32300	25800				
5	5800	4800	28600	24400	34500	29600	32500	26000				
6	5000	4400	28500	24500	32700	26300	32500	28500				
7	5600	4300	30200	24800	32400	27900	37200	28100				
8	5200	4200	30100	28600	34300	30500	36500	27600				
9	6800	4800	29800	28800	33400	24800	40400	27500				
10	8300	5100	28800	25800	32600	24400	33400	25200				
11	8600	6700	26700	23400	34900	27000	29000	24100				
12	9900	7700	26700	24000	36400	29400	29300	22900				
13	12400	8500	27300	23400	38800	29700	29500	23300				
14	15200	9900	26900	21700	39600	31800	31800	28000				
15	15100	11100	28300	19700	40000	32100						
16	16800	11300	29200	20700	40700	32400						
17	17800	12000	30800	23000	40900	34600						
18	17400	14400	29800	22100	39500	34100						
19	18000	14400	31300	24700	37900	32200						
20	21400	11900	33000	24400	39900	33500						
21	20100	15100	32400	27500	41000	37100						
22	20000	17900	30500	23500	39900	37400						
23	20200	15900	23000	18800	40400	37000						
24	19600	16000	20900	16600	40000	36400						
25	25300	15900	22000	15300	41200							
26	23800	17000	24200	17900	38200	34600						
27	23700	18800	30400	20700	36100	30700						
28	29800	18000	32900	26100	35300	31000						
29	32900	22900	36800	27000	---	---						
30	30300	22600	35200	28000	36500	29300						
31	--	--	--	36500	28900	---						

TABLE 3A.--LOWER CALCASIEU RIVER NEAR CAMERON, LOUISIANA, ONCE DAILY WATER TEMPERATURE DATA,  
APRIL 1987 TO AUGUST 1988

[DASHES (---), NOT RECORDED]

DAY	APR	WATER TEMPERATURE, DEGREES CELSIUS, APRIL TO DECEMBER 1987										NOV	DEC
		MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC				
1	---	22.0	28.0	30.0	33.0	28.0	---	23.0	16.0	---	---	23.0	16.0
2	---	22.0	28.0	30.5	33.0	29.5	27.5	23.5	18.0	---	---	23.5	18.0
3	---	23.5	29.0	31.0	33.5	30.0	23.5	23.5	18.5	---	---	23.5	18.5
4	---	23.0	28.5	31.5	33.5	31.5	24.5	24.0	19.0	---	---	24.0	19.0
5	---	23.0	28.0	32.0	33.0	31.5	25.0	23.5	19.0	---	---	23.5	19.0
6	---	23.0	27.5	30.5	33.0	31.0	24.0	21.5	18.5	---	---	21.5	18.5
7	---	22.0	27.5	31.0	33.0	30.5	24.5	21.5	18.0	---	---	21.5	18.0
8	15.5	22.0	27.5	29.0	---	31.0	24.0	21.0	18.5	---	---	21.0	18.5
9	17.0	23.0	26.0	30.5	32.0	31.5	24.5	21.0	18.5	---	---	21.0	18.5
10	18.5	24.0	24.0	31.5	31.0	31.0	24.5	21.0	18.5	---	---	21.0	18.5
11	18.5	24.0	25.0	32.0	31.0	31.0	25.0	21.0	18.5	---	---	21.0	18.5
12	19.5	24.0	27.0	32.0	---	31.0	23.0	21.0	18.5	---	---	21.0	18.5
13	20.0	24.0	27.0	33.5	32.0	31.5	21.5	22.0	18.5	---	---	22.0	18.5
14	19.0	25.5	25.5	33.0	32.0	32.0	21.5	19.0	18.5	---	---	19.0	18.5
15	19.0	25.0	27.5	33.5	32.5	32.0	23.0	19.5	18.5	---	---	19.5	18.5
16	---	25.5	27.0	32.5	32.5	30.0	23.5	19.5	18.5	---	---	19.5	18.5
17	20.0	24.5	27.5	32.5	33.0	31.5	23.5	19.5	18.5	---	---	19.5	18.5
18	20.0	25.5	27.5	32.5	---	31.0	24.0	18.5	18.5	---	---	18.5	18.5
19	21.0	25.5	27.0	32.5	34.0	31.0	24.0	18.0	18.0	---	---	18.0	18.0
20	22.0	25.5	27.5	31.0	35.0	30.0	24.5	19.0	18.5	---	---	19.0	18.5
21	22.0	26.5	28.0	31.5	34.5	29.5	22.5	19.5	18.5	---	---	19.5	18.5
22	21.0	27.0	29.5	32.5	32.0	28.0	21.0	18.5	18.5	---	---	18.0	18.5
23	21.0	27.0	29.5	32.0	33.0	28.0	21.0	19.0	18.5	---	---	19.0	18.5
24	22.0	28.5	28.5	32.0	32.5	27.0	22.0	20.0	18.5	---	---	20.0	18.5
25	22.0	28.0	33.0	32.5	33.0	27.0	22.5	19.5	18.5	---	---	19.5	18.5
26	22.5	28.0	33.0	32.5	33.5	27.0	22.0	17.5	17.5	---	---	17.5	17.5
27	24.0	27.0	30.0	33.0	33.5	27.0	22.0	15.5	15.5	---	---	15.5	15.5
28	---	26.5	30.5	33.0	33.0	27.0	21.5	15.5	15.5	---	---	15.5	15.5
29	---	27.0	---	32.5	32.0	27.5	21.5	16.0	16.0	---	---	16.0	16.0
30	22.0	26.5	29.5	33.0	30.5	26.0	23.0	16.0	16.0	---	---	16.0	16.0
31	---	26.5	---	33.0	29.5	29.5	23.0	15.0	15.0	---	---	15.0	15.0

TABLE 3A.--LOWER CALCASIEU RIVER NEAR CAMERON, LOUISIANA, ONCE DAILY WATER TEMPERATURE DATA,  
APRIL 1987 TO AUGUST 1988--CONTINUED

WATER TEMPERATURE, DEGREES CELSIUS, JANUARY TO AUGUST 1987								
DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
1	13.0	---	17.0	20.5	23.5	26.5	29.0	32.0
2	12.5	16.0	17.5	21.0	24.0	27.0	29.0	---
3	---	16.5	14.0	23.5	24.0	27.0	30.0	---
4	10.0	16.0	16.0	24.0	25.0	25.5	30.0	32.0
5	9.5	10.0	16.0	23.5	---	26.0	29.5	32.0
6	11.5	7.5	---	21.5	25.5	28.0	28.0	31.5
7	8.0	6.0	18.0	23.0	25.0	28.0	27.0	32.0
8	7.0	7.0	18.0	22.0	25.0	28.0	27.0	---
9	7.0	9.0	18.5	23.0	26.0	28.5	28.5	---
10	6.0	10.0	18.5	19.5	27.0	28.5	28.0	30.5
11	8.0	---	19.0	---	27.5	27.5	27.5	29.0
12	10.0	10.0	19.5	18.0	26.0	27.0	27.0	29.5
13	8.5	12.5	19.5	19.0	26.5	26.5	29.0	30.0
14	---	12.0	15.0	20.5	28.0	27.0	29.0	30.0
15	9.0	12.5	16.0	20.5	27.5	27.0	30.0	---
16	10.0	---	16.0	---	28.0	27.0	30.5	30.0
17	11.0	---	16.0	22.5	27.0	28.0	31.0	31.5
18	11.0	14.5	13.5	23.0	27.0	27.5	29.5	31.5
19	12.0	14.0	14.0	24.0	26.5	27.5	29.5	31.5
20	12.5	14.0	15.5	23.0	27.0	28.0	29.5	30.5
21	12.5	14.5	18.0	24.0	27.0	28.0	29.0	30.5
22	10.0	14.0	18.0	24.0	26.0	29.0	30.0	32.0
23	10.5	16.0	18.0	24.5	27.0	27.0	30.5	31.5
24	12.5	15.0	19.0	23.0	27.0	28.0	30.5	31.5
25	12.0	12.5	16.5	26.0	28.0	29.0	29.0	31.0
26	12.0	14.5	20.0	24.5	26.5	29.0	31.5	31.5
27	12.5	15.0	---	25.5	26.0	30.5	29.5	---
28	---	15.0	---	22.5	---	30.0	31.5	31.5
29	13.0	16.5	20.0	25.5	26.5	29.5	31.0	31.0
30	13.5	---	20.0	22.5	27.0	32.0	32.0	29.5
31	15.0	---	20.0	---	26.5	29.5	32.5	29.5

TABLE 3B.--LOWER CALCASIEU RIVER NEAR CAMERON, LOUISIANA, ONCE DAILY SPECIFIC CONDUCTANCE DATA, APRIL 1987 TO AUGUST 1988

SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, APRIL TO DECEMBER 1987

DAY	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1	---	44600	21700	26200	15420	30200	---	37600	18280
2	---	42400	24000	18020	15590	30700	35600	40100	41000
3	---	44200	23900	12490	17370	32600	33400	40500	40700
4	---	45500	25800	12570	19380	34800	39800	40900	43100
5	---	38700	30400	10780	19900	39300	40000	41400	40900
6	---	33800	32400	17660	27600	40100	39900	40800	42000
7	---	34200	33200	18990	33000	40400	39400	41900	24500
8	---	34000	32300	23500	---	41200	39300	40100	21900
9	34600	35800	28900	21100	40000	37700	38300	38400	---
10	36300	31000	24000	29100	34400	36400	36100	33900	19300
11	40500	31900	23600	27500	---	36000	36300	35200	19600
12	40800	30400	24900	25800	---	33600	34400	35300	---
13	40200	30100	35800	19010	25400	33400	34800	35400	29300
14	33800	29600	---	14830	24100	30100	36600	40500	38800
15	29700	32600	33400	13660	22500	37600	37800	42800	---
16	---	35500	33100	13000	25300	41200	38400	40800	---
17	41800	39700	32800	12540	27200	40500	36300	34300	43600
18	42100	---	17200	13740	---	41400	38100	37400	43900
19	41700	38800	12950	15240	26900	36300	40400	32500	45100
20	41600	38100	12080	18990	27300	42800	39100	40200	44100
21	46100	37800	14610	15440	31200	42400	---	40500	32600
22	43100	34800	16390	15470	31600	36200	38900	40800	---
23	41000	34100	18890	27900	44300	41900	39300	30900	37400
24	31700	36500	19070	28700	43800	40600	38900	30500	31300
25	37600	33900	17080	25600	42700	36300	35900	22100	29500
26	33000	29200	18110	19680	41500	35600	34800	14400	25300
27	28800	21500	36000	19460	36800	36600	34800	14400	20200
28	35200	21400	37000	19190	33400	36400	34800	13900	20600
29	44900	18000	---	18500	30900	34000	35400	13900	20600
30	44500	19070	34200	18870	29500	32300	36000	18700	45000
31	---	18960	---	16420	30300	---	36400	---	38300

TABLE 3B.--LOWER CALCASIEU RIVER NEAR CAMERON, LOUISIANA, ONCE DAILY SPECIFIC CONDUCTANCE DATA, APRIL 1987 TO AUGUST 1988--CONTINUED

SPECIFIC CONDUCTANCE, US/CM AT 25 DEGREES CELSIUS, JANUARY TO AUGUST 1988

DAY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
1	21300	---	32300	22800	29200	38200	43800	39400
2	---	24500	33200	15800	30000	36500	45200	---
3	---	21400	25900	19700	29000	37700	45000	---
4	23200	16100	26600	14900	28100	38700	40300	33800
5	22000	18400	29300	15200	---	39400	39500	32500
6	---	12100	---	16900	40500	38800	38600	34900
7	21400	16400	19400	29200	39400	38000	38000	34000
8	21100	18000	25400	38000	38300	36100	41000	---
9	20200	12600	---	31800	37600	36300	---	47200
10	19800	29000	26300	33800	35000	33900	39700	47600
11	27900	24700	28600	---	39000	39800	---	47200
12	29400	35100	26000	35600	32000	41400	41400	---
13	28000	38600	30300	40900	33800	44600	44600	41800
14	---	35000	20200	35000	33900	44100	42700	37400
15	38000	26900	35200	37500	39400	44400	41000	---
16	36600	---	36100	---	39400	41300	40600	27800
17	31400	---	34700	37800	42000	40600	36800	27300
18	28400	27600	---	38900	44200	41900	33900	28400
19	28300	17400	19200	28400	44700	42900	32800	21900
20	26600	19700	37500	39000	45200	42800	33000	26400
21	22100	16200	23800	38700	43400	40500	40500	27500
22	22800	37100	36000	38300	43800	39300	29800	31700
23	24600	33200	36900	39100	42000	---	30800	33400
24	22300	35500	39000	35300	37000	40000	32700	33000
25	17100	37900	29300	33200	38300	36000	---	44800
26	42000	35800	27200	34900	42200	36200	36500	38500
27	43000	28000	---	32200	44400	35500	43000	---
28	---	31900	---	35900	---	38600	---	43800
29	42200	27400	33900	38300	46700	42100	45000	36799
30	41700	---	22500	31100	47900	42400	44600	36700
31	41700	---	21600	---	43400	---	44300	33600

TABLE 4A.--SALINITY PROFILE DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
FEBRUARY AND MARCH 1987

SALINITY PROFILE NO. 1  
FEBRUARY 26, 1987

[TEMP, TEMPERATURE; DEG C, DEGREES CELSIUS; DO, DISSOLVED OXYGEN;  
MG/L, MILLIGRAMS PER LITER; SPEC COND, SPECIFIC CONDUCTANCE;  
US/CM, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS; SAL,  
SALINITY; PPT, PARTS PER THOUSAND; ORP, OXIDATION-REDUCTION  
POTENTIAL; MV, MILLIVOLTS; DASHES (---), NOT RECORDED]

SITE NO.					SPEC	COND	SAL	ORP
TIME	DEPTH	TEMP	PH	DO	(US/CM)	(PPT)	(MV)	
	(FEET)	(DEG C)	(UNITS)	(MG/L)				
1 1100	3.3	11.4	6.7	8.1	425	0.0	+209	
	9.9	11.4	6.7	8.2	425	0.0	+207	
	16.5	11.4	6.7	8.1	515	0.0	+207	
	23.1	11.4	6.7	8.0	778	0.0	+207	
	29.7	11.4	6.7	7.7	3,400	0.8	+210	
	34.6	12.0	7.3	7.0	12,000	6.3	+213	
2 1105	3.3	11.2	6.7	8.1	580	0.0	+222	
	9.9	11.3	6.7	8.1	1,100	0.0	+222	
	16.5	11.3	6.8	8.1	1,160	0.1	+219	
	23.1	11.4	6.8	7.4	6,300	3.1	+225	
	30.6	12.2	7.5	6.2	21,000	12.0	+229	
3 1120	3.3	11.2	6.7	8.0	1,500	0.2	+211	
	9.9	11.3	6.7	8.0	1,350	0.2	+210	
	16.5	11.3	6.8	7.8	1,600	0.3	+208	
	23.1	11.7	6.7	7.3	1,500	0.6	+215	
	29.7	12.5	7.9	---	30,600	18.5	+209	
	36.3	12.8	7.9	7.1	33,400	20.8	+211	
	44.6	---	---	---	33,800	21.1	---	
4 1135	3.3	11.3	6.7	8.0	1,850	0.5	+194	
	9.9	11.4	6.7	7.9	2,100	0.7	+194	
	16.5	11.4	6.8	7.9	2,600	0.9	+193	
	23.1	11.4	6.9	7.7	5,300	2.4	+195	
	29.7	11.8	7.2	7.2	16,800	8.7	+197	
	38.0	12.6	7.8	7.8	32,400	20.1	+203	
5 1217	3.3	11.4	6.7	7.9	2,500	0.8	+091	
	9.9	11.4	6.7	7.9	2,720	1.0	+087	
	16.5	11.4	6.7	7.8	2,800	1.1	+081	
	23.1	11.4	6.8	7.8	3,780	1.7	+071	
	29.7	11.7	7.0	7.3	7,200	3.5	+056	
	36.3	12.6	7.8	5.8	32,600	20.2	+027	

TABLE 4A.--SALINITY PROFILE DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
FEBRUARY AND MARCH 1987--CONTINUED

SITE NO.	TIME	DEPTH (FEET)	TEMP (DEG C)	pH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
5A 1200	3.3	11.8	6.7	9.7	3,510	1.4	---	
	9.9	12.0	7.0	12.3	4,820	2.1	---	
	16.5	15.4	7.0	11.9	29,600	18.2	-259	
6 1255	3.3	11.4	6.7	10.2	2,600	0.9	+120	
	9.9	11.5	6.8	11.6	2,640	0.9	+114	
	16.5	11.5	6.9	13.4	3,610	1.5	+106	
	23.1	11.6	7.0	15.0	9,200	4.9	+106	
	29.7	11.7	7.2	16.5	10,400	5.6	+093	
	36.3	12.6	7.9	13.3	34,400	21.6	+080	
7 1310	3.3	11.5	6.7	7.8	3,100	1.2	+127	
	9.9	11.5	6.7	7.8	3,330	1.3	+126	
	16.5	11.5	6.8	7.8	3,480	1.4	+122	
	23.1	11.5	6.9	7.7	5,450	2.6	+110	
	29.7	11.9	7.4	6.7	16,900	9.0	+106	
	36.3	12.6	7.8	6.1	34,100	21.5	+098	
7A 1331	3.3	11.7	6.7	8.1	2,930	1.1	+134	
	9.9	11.5	6.7	8.1	3,240	1.3	+132	
	16.5	11.5	6.7	8.1	3,270	1.3	+127	
	23.1	11.4	6.9	7.8	3,750	1.6	+121	
	29.7	11.8	7.3	6.8	11,000	6.2	+120	
	36.3	12.6	7.8	6.2	34,300	21.5	+116	
7B 1341	3.3	11.5	6.6	9.3	3,480	1.4	+144	
	9.9	11.4	6.7	11.8	3,780	1.6	+143	
	16.5	11.4	6.7	12.3	4,090	1.8	+140	
	23.1	11.4	6.8	13.1	4,750	2.2	+135	
	29.7	11.8	7.2	12.1	13,400	7.4	+132	
	36.3	12.6	7.8	11.2	34,000	21.3	+125	
9 1357	3.3	11.5	6.8	7.9	4,500	2.0	+141	
	9.9	11.5	6.8	7.8	4,580	2.1	+138	
	16.5	11.6	7.0	7.8	5,420	2.5	+134	
	23.1	11.6	7.2	7.4	7,900	3.7	+130	
	29.7	12.4	7.8	6.2	27,500	16.7	+130	
	36.3	12.6	7.8	6.0	35,000	22.0	+133	
9B 1652	3.3	12.9	7.0	8.1	3,690	1.5	+129	
	9.9	12.6	7.2	8.1	4,260	1.9	+131	
	16.5	12.5	7.3	7.8	5,590	2.7	+127	
	23.1	12.4	7.2	6.7	9,200	4.8	+130	
	29.7	13.2	7.6	4.9	22,900	13.7	+129	
	36.3	12.8	7.9	5.9	36,200	23.0	+126	

TABLE 4A.--SALINITY PROFILE DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
FEBRUARY AND MARCH 1987--CONTINUED

SITE NO. TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
10A 1618	1.6	12.7	6.9	8.2	4,750	2.2	+145
	3.3	11.9	6.8	8.0	5,940	2.9	+148
	6.6	11.8	6.8	8.3	6,170	3.0	+147
	7.3	11.8	6.8	8.8	6,410	3.2	+148
10B 1627	1.6	12.4	6.9	8.3	5,050	2.3	+154
	3.3	12.0	6.8	8.0	5,340	2.5	+154
	6.6	11.9	6.9	8.0	6,080	3.0	+156
	8.2	11.9	6.9	8.3	6,520	3.2	+158
10C 1636	1.6	12.6	6.9	8.1	4,880	2.2	+146
	3.3	12.3	6.9	8.0	5,100	2.4	+148
	9.9	12.0	7.0	7.7	7,340	3.7	+152
	16.5	12.2	7.1	6.9	10,800	6.1	+151
	23.1	13.9	7.0	1.6	23,500	14.0	+164
11 1406	1.6	13.8	7.1	7.9	2,550	0.9	+126
	3.3	11.7	6.9	7.9	4,250	1.9	+134
	9.9	11.7	6.9	7.7	5,410	2.5	+139
	16.5	11.6	7.0	7.7	6,950	3.6	+139
	23.1	11.6	7.0	7.6	9,140	4.8	+137
	29.7	12.1	7.6	6.7	19,400	11.3	+133
	36.3	12.6	7.9	6.3	35,900	22.7	+131
13 1420	3.3	12.1	6.9	8.0	4,850	2.2	+138
	9.9	12.0	6.9	7.9	5,230	2.4	+138
	16.5	11.6	6.9	7.7	5,890	2.8	+138
	23.1	11.6	7.1	7.5	8,380	4.3	+135
	29.7	12.2	7.8	6.6	25,000	15.1	+132
	36.3	12.5	7.9	6.3	35,100	21.9	+132
15 1430	3.3	12.1	6.9	8.0	5,030	2.3	+135
	9.9	12.0	7.0	8.0	5,510	2.6	+134
	16.5	12.0	7.1	7.9	6,200	3.1	+131
	23.1	12.0	7.2	7.6	8,500	3.9	+132
	29.7	12.4	7.9	6.6	32,600	20.7	+126
	36.3	12.5	8.0	6.6	35,700	22.2	+128
17 1445	3.3	12.0	7.0	7.9	7,000	3.5	+130
	9.9	12.1	7.1	7.9	7,800	4.0	+130
	16.5	12.2	7.2	7.9	8,310	4.3	+127
	23.1	12.1	7.6	7.2	18,000	10.5	+123
	29.7	12.4	8.0	6.7	34,900	21.9	+118
	36.3	12.4	8.0	7.0	35,900	22.6	+119

TABLE 4A.--SALINITY PROFILE DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
FEBRUARY AND MARCH 1987--CONTINUED

SITE NO.	TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
19 1504	3.3	12.1	7.1	7.9	7,900	4.0	+138	
	9.9	12.0	7.3	7.8	9,760	5.2	+133	
	16.5	12.1	7.6	7.4	18,500	10.5	+133	
	23.1	12.3	8.0	7.1	33,100	20.6	+127	
	29.7	12.4	8.0	7.0	35,300	22.2	+129	
	36.3	12.4	8.0	7.1	35,500	22.3	+132	
20 1515	3.3	12.1	7.2	8.0	8,000	4.1	+134	
	9.9	12.1	7.3	7.8	8,590	4.4	+130	
	16.5	12.1	7.8	7.3	20,000	11.0	+128	
	23.1	12.2	7.9	7.2	26,500	15.7	+125	
	29.7	12.3	8.0	7.1	34,900	21.9	+125	

SALINITY PROFILE NO. 2

MARCH 12, 1987

1 1000	1.6	14.5	6.2	7.3	441	0.0	+219
	3.3	14.4	6.2	7.0	450	0.0	+217
	9.9	14.4	6.4	7.0	630	0.0	+209
	16.5	14.4	6.5	6.9	1,800	0.5	+195
	23.1	14.5	6.7	6.9	4,700	2.1	+187
	29.7	15.0	7.4	6.6	16,300	9.2	+178
	34.6	14.9	7.3	7.6	17,700	10.2	+180
2 1010	1.6	14.6	6.2	7.0	302	0.0	+208
	3.3	14.5	6.2	7.0	340	0.0	+211
	9.9	14.4	6.2	7.0	440	0.0	+210
	16.5	14.4	6.3	6.9	520	0.0	+194
	25.4	14.9	7.1	6.1	11,000	5.0	+191
	29.7	15.0	7.4	6.0	16,800	9.7	+197
	36.3	15.0	7.4	5.7	18,300	11.3	+203
3 1020	3.3	14.5	6.2	6.9	480	0.0	+209
	9.9	14.5	6.3	6.9	540	0.0	+199
	16.5	14.4	6.5	6.9	540	0.0	+184
	23.1	14.8	7.0	6.2	14,300	8.0	+191
	29.7	15.0	7.4	5.9	17,700	10.2	+200
	36.3	15.0	7.4	5.7	19,800	11.7	+205
4 1035	3.3	14.5	6.2	6.9	540	0.0	+204
	9.9	14.5	6.2	6.9	570	0.0	+204
	16.5	14.4	6.4	6.8	1,000	0.0	+196
	23.1	14.7	6.7	6.4	8,000	4.5	+194
	27.9	15.0	7.4	5.8	18,600	10.7	+200
	36.3	15.0	7.4	5.6	22,000	13.2	+207

TABLE 4A.--SALINITY PROFILE DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
FEBRUARY AND MARCH 1987--CONTINUED

SITE NO.	TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
5 1045	3.3	14.4	6.2	6.8	515	0.0	+210	
	9.9	14.4	6.3	6.9	610	0.0	+201	
	16.5	14.4	6.6	6.7	960	0.0	+185	
	23.1	15.0	7.1	6.1	12,800	6.7	+190	
	29.7	15.1	7.5	5.9	18,500	10.8	+190	
	36.3	15.0	7.4	6.0	22,500	13.8	+198	
5A 1055	1.6	14.5	6.2	7.4	420	0.0	+094	
	3.3	14.0	6.2	7.4	400	0.0	+100	
	9.9	14.7	6.6	5.0	1,400	0.4	+110	
	15.2	16.2	6.9	0.3	29,200	17.9	-263	
6 1115	3.3	14.7	6.2	6.9	532	0.0	+125	
	9.9	14.6	6.2	6.8	540	0.0	+124	
	16.5	14.4	6.3	6.8	1,000	0.0	+103	
	23.1	15.0	7.2	6.1	13,700	7.5	+058	
	29.7	15.1	7.6	5.8	20,000	12.0	+040	
	36.3	15.0	7.5	5.2	22,700	13.5	+027	
7 1130	3.3	14.7	6.2	7.0	630	0.0	+147	
	9.9	14.6	6.3	7.0	850	0.0	+140	
	16.5	14.5	6.5	6.9	1,050	0.0	+130	
	23.1	15.0	7.2	6.2	13,000	7.2	+110	
	29.7	15.2	7.6	5.6	20,500	12.0	+110	
	36.3	15.1	7.6	5.3	23,500	13.9	+115	
7A 1155	3.3	14.3	6.3	7.3	719	0.0	+154	
	9.9	14.2	6.4	7.2	740	0.0	+153	
	16.5	14.4	6.7	7.0	1,530	0.3	+136	
	23.1	15.1	7.4	6.2	14,300	8.0	+126	
	29.7	15.2	7.7	5.8	20,400	12.0	+123	
	36.3	15.1	7.6	5.3	23,000	14.0	+130	
7B 1205	3.3	15.0	6.2	7.0	740	0.0	+154	
	9.9	14.5	6.2	6.9	740	0.0	+157	
	16.5	14.3	6.5	6.9	850	0.0	+145	
	23.1	14.9	7.7	6.2	12,600	6.7	+130	
	29.7	15.2	7.7	6.0	20,600	12.0	+125	
	36.3	15.0	7.6	6.0	22,000	13.0	+133	
9 1218	3.3	14.7	6.3	6.9	1,250	0.1	+149	
	9.9	14.4	6.4	6.8	1,930	0.5	+150	
	16.5	14.5	6.5	6.6	3,920	1.7	+145	
	23.1	15.0	7.3	6.1	13,500	7.5	+133	
	29.7	15.2	7.6	5.8	20,200	12.0	+129	
	36.3	15.3	7.7	5.7	22,000	13.2	+132	

TABLE 4A.--SALINITY PROFILE DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
FEBRUARY AND MARCH 1987--CONTINUED

SITE NO. TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
9B 1230	3.3	14.5	6.7	6.1	1,970	0.5	+025
	9.9	14.9	6.7	5.4	2,350	0.7	+014
	16.5	14.9	6.7	6.0	6,400	3.3	+052
	23.1	15.0	7.2	5.6	15,800	9.0	+106
	29.7	15.2	7.4	5.6	20,600	12.0	+100
	38.0	15.0	7.3	3.2	22,900	13.6	+100
10A 1250	1.6	14.9	6.4	7.4	2,720	0.7	+121
	3.3	14.7	6.4	7.3	2,320	0.7	+114
	5.0	14.6	6.3	7.2	2,380	0.7	+104
10B 1330	1.6	15.3	6.4	7.0	2,250	0.7	+138
	3.3	15.0	6.4	7.0	2,230	0.7	+138
	6.6	14.4	7.1	6.4	2,320	0.7	+134
10C 1335	1.6	15.3	6.4	7.6	1,380	0.2	+151
	3.3	14.5	6.4	7.6	1,420	0.2	+155
	9.9	13.9	6.3	7.5	1,440	0.2	+162
	16.5	13.6	6.3	7.3	1,480	0.3	+163
	23.1	13.6	6.3	7.3	1,490	0.3	+160
11 1530	1.6	15.4	6.6	7.1	1,940	0.5	+128
	3.3	15.0	6.5	7.0	1,930	0.5	+132
	9.9	14.7	6.8	6.7	3,110	1.2	+128
	16.5	14.7	6.9	6.6	5,090	2.1	+125
	23.1	15.2	7.6	6.1	16,700	9.3	+123
	29.7	15.2	7.8	5.9	21,400	12.8	+119
	36.3	15.2	8.0	5.7	25,000	15.1	+120
13 1410	3.3	14.9	6.6	6.9	2,170	0.7	+128
	9.9	14.5	6.8	6.8	2,700	0.9	+131
	16.5	14.6	7.1	6.7	6,100	3.0	+138
	23.1	15.0	7.6	6.2	17,300	10.1	+144
	29.7	15.1	7.8	6.0	20,800	12.4	+142
	36.3	15.2	8.0	5.7	25,000	15.1	+120
15 1420	3.3	14.6	6.8	7.2	2,990	1.1	+129
	9.9	14.3	6.9	7.1	4,850	2.2	+130
	16.5	14.7	7.3	6.6	11,400	6.6	+133
	23.1	14.9	7.6	6.4	17,000	10.0	+125
	29.7	15.1	7.8	6.2	23,100	13.5	+120
	36.3	15.2	8.0	5.9	28,000	17.1	+119

TABLE 4A.--SALINITY PROFILE DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
FEBRUARY AND MARCH 1987--CONTINUED

SITE NO. TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
17 1435	3.3	14.9	6.8	7.3	4,020	1.7	+125
	9.9	14.4	6.9	7.0	6,020	2.9	+126
	16.5	14.6	7.2	6.8	10,860	5.8	+125
	23.1	14.9	7.6	6.5	16,500	9.8	+119
	29.7	15.1	7.9	6.2	24,600	14.4	+114
	36.3	15.0	8.0	6.1	30,600	18.8	+115
19 1448	3.3	14.4	7.0	7.4	4,730	2.1	+127
	9.9	14.6	7.2	6.8	10,000	5.0	+126
	16.5	14.7	7.4	6.7	12,800	7.2	+122
	23.1	15.0	7.8	6.4	21,500	12.6	+116
	29.7	14.9	8.0	6.2	29,700	18.5	+113
	36.3	14.8	8.0	6.2	31,700	19.4	+114
20 1505	3.3	14.7	7.0	7.5	4,100	1.7	+132
	9.9	14.4	7.2	7.1	6,410	3.1	+132
	16.5	14.8	7.5	6.7	13,200	7.0	+132
	23.1	14.9	8.0	6.3	23,600	14.0	+125
	29.7	14.9	8.0	6.3	29,700	18.3	+125
	36.3	14.7	8.0	6.4	31,800	19.6	+130

SALINITY PROFILE NO. 3

MARCH 18, 1987

1 0718	1.6	15.5	6.2	6.1	225	0.0	+251
	3.3	15.5	6.3	6.5	214	0.0	+235
	9.9	15.5	6.3	6.5	240	0.0	+237
	16.5	15.5	6.3	6.4	233	0.0	+245
	23.1	15.5	6.2	6.2	239	0.0	+248
	29.7	15.5	6.2	6.2	252	0.0	+252
	36.3	15.5	6.2	6.2	237	0.0	+255
2 0727	1.6	15.6	6.3	6.5	296	0.0	+242
	3.3	15.6	6.3	6.5	303	0.0	+242
	9.9	15.6	6.3	6.5	349	0.0	+238
	16.5	15.6	6.3	6.6	405	0.0	+228
	23.1	15.6	6.5	6.8	2,030	0.5	+209
	29.7	15.5	6.5	6.6	2,030	0.5	+204
	36.3	15.5	6.6	6.3	1,980	0.5	+199

TABLE 4A.--SALINITY PROFILE DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
FEBRUARY AND MARCH 1987--CONTINUED

SITE NO. TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
3 0740	1.6	15.6	6.3	6.7	539	0.0	+230
	3.3	15.6	6.3	6.7	516	0.0	+240
	9.9	15.6	6.4	6.7	540	0.0	+241
	16.5	15.6	6.5	6.6	640	0.0	+234
	23.1	15.5	6.5	6.4	2,800	0.9	+235
	29.7	15.5	6.5	6.3	3,750	1.4	+240
	36.3	15.5	6.6	6.4	3,800	1.8	+235
4 0800	3.3	15.6	6.3	6.7	668	0.0	+230
	9.9	15.5	6.3	6.6	801	0.0	+235
	16.5	15.5	6.4	6.6	965	0.0	+232
	23.1	15.5	6.4	6.6	1,010	0.1	+229
	29.7	15.5	6.4	6.6	1,830	0.3	+222
	36.3	15.5	6.5	6.4	3,950	1.4	+219
5 0810	3.3	15.6	6.4	6.8	985	0.0	+218
	9.9	15.6	6.4	6.8	1,105	0.0	+220
	16.5	15.6	6.4	6.7	1,374	0.2	+221
	23.1	15.5	6.5	7.0	1,900	0.5	+218
	29.7	15.5	6.6	7.0	3,080	1.2	+213
	36.3	15.5	6.6	7.0	3,080	1.2	+213
5A 0821	1.6	16.0	6.8	7.8	2,310	0.7	+127
	3.3	16.0	6.8	7.8	2,310	0.7	+117
	9.9	16.0	6.8	7.8	2,340	0.8	+086
6 0828	3.3	15.6	6.4	6.7	1,455	0.3	+186
	9.9	15.6	6.4	6.8	1,610	0.3	+187
	16.5	15.6	6.5	6.8	1,640	0.4	+182
	23.1	15.6	6.5	7.3	1,670	0.4	+171
	29.7	15.6	6.7	7.1	2,570	0.9	+160
	36.3	15.5	6.8	6.8	6,080	3.6	+154
7 0840	3.3	15.6	6.5	6.7	1,740	0.4	+187
	9.9	15.5	6.5	6.8	1,770	0.4	+190
	16.5	15.5	6.5	6.8	1,800	0.4	+188
	23.1	15.5	6.5	6.7	2,460	0.8	+187
	29.7	15.5	6.7	7.0	2,700	1.1	+176
	36.3	15.2	7.5	7.3	21,500	12.6	+173
7A 0852	3.3	16.2	7.1	7.6	2,270	0.7	+174
	9.9	16.2	7.0	7.6	2,410	0.8	+176
	16.5	16.2	7.0	7.7	2,520	0.8	+175
	23.1	16.1	7.0	7.7	2,610	0.9	+172
	29.7	16.2	7.1	7.7	2,670	1.0	+165
	36.3	15.2	7.6	4.5	24,000	14.1	+169

TABLE 4A.--SALINITY PROFILE DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
FEBRUARY AND MARCH 1987--CONTINUED

SITE NO. TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
7B 0912	3.3	16.0	6.7	7.1	2,220	0.7	+172
	9.9	15.8	6.7	7.1	2,390	0.8	+179
	16.5	15.9	6.7	7.0	2,500	0.8	+178
	23.1	16.0	6.8	7.4	2,770	1.0	+170
	29.7	16.2	7.1	7.5	3,200	1.5	+164
	36.3	15.2	7.4	5.3	20,600	11.5	+170
9 0925	3.3	15.9	6.6	7.2	2,410	0.8	+167
	9.9	15.8	6.6	7.1	2,670	0.9	+173
	16.5	15.8	6.6	7.0	2,740	1.0	+171
	23.1	15.7	6.7	6.9	4,030	1.7	+168
	29.7	15.7	6.9	6.7	5,600	2.8	+157
	36.3	15.3	7.2	5.4	16,300	9.5	+151
9B 0938	3.3	17.6	7.2	7.1	3,160	1.2	+103
	9.9	16.8	7.1	7.1	3,270	1.3	+105
	16.5	17.0	7.1	7.4	3,510	1.3	+099
	23.1	17.3	7.2	7.2	4,150	1.9	+067
	29.7	16.6	7.2	7.0	9,940	5.6	+156
	36.3	15.2	7.4	4.0	23,400	10.8	+159
10A 0954	1.6	16.2	6.8	7.5	3,290	1.3	+156
	3.3	16.2	6.8	7.5	3,280	1.3	+159
	7.3	16.2	6.8	7.7	3,330	1.3	+159
10B 1003	1.6	16.9	7.0	8.1	3,830	1.6	+170
	3.3	16.9	7.0	8.2	3,840	1.6	+173
	6.9	16.8	7.0	8.1	3,850	1.6	+174
10C 1014	1.6	16.8	7.0	7.7	3,920	1.7	+170
	3.3	16.8	6.9	7.3	4,850	3.0	+176
	9.9	16.8	6.9	7.3	4,850	3.0	+176
	16.5	16.3	6.9	6.5	7,620	3.6	+182
	23.1	15.2	6.8	5.4	11,320	5.8	+188
11 1232	1.6	16.9	6.9	7.2	3,300	1.3	+155
	3.3	17.0	6.9	7.2	3,300	1.3	+157
	9.9	16.8	6.9	7.2	3,400	1.3	+156
	16.5	16.7	6.9	7.1	3,400	1.3	+152
	23.1	15.9	6.9	6.8	4,100	1.8	+145
	29.7	15.4	7.3	5.4	15,800	8.8	+135
	36.3	15.2	7.6	4.8	22,200	13.6	+123

TABLE 4A.--SALINITY PROFILE DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
FEBRUARY AND MARCH 1987--CONTINUED

SITE NO.	TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
13 1033	3.3	16.3	6.9	7.1	3,760	1.6	+151	
	9.9	16.3	6.9	7.0	3,780	1.6	+151	
	16.5	16.0	6.9	6.9	3,870	1.9	+151	
	23.1	15.9	7.0	6.7	7,340	3.4	+141	
	29.7	15.8	7.2	6.6	11,100	6.3	+144	
	36.3	15.2	7.5	5.1	20,900	12.6	+140	
15 1045	3.3	16.5	7.0	7.3	4,390	2.0	+150	
	9.9	16.2	7.0	7.1	5,260	2.5	+149	
	16.5	16.1	7.1	6.9	6,800	3.3	+147	
	23.1	16.0	7.2	6.7	10,500	5.8	+143	
	29.7	15.7	7.4	5.8	17,500	7.4	+137	
	36.3	15.1	7.6	5.0	23,500	13.8	+134	
17 1058	3.3	16.7	7.0	7.3	4,860	2.2	+167	
	9.9	16.4	7.1	7.2	5,120	2.4	+169	
	16.5	16.6	7.2	7.2	6,920	5.1	+170	
	23.1	16.2	7.3	6.6	10,230	5.6	+172	
	29.7	15.5	7.5	5.6	18,900	10.7	+172	
	36.3	14.9	7.6	5.1	24,500	14.9	+173	
19 1110	3.3	17.1	7.2	7.7	5,710	2.7	+156	
	9.9	16.8	7.2	7.6	6,550	3.3	+155	
	16.5	16.5	7.2	7.1	8,950	4.9	+153	
	23.1	16.2	7.4	6.7	12,700	6.8	+148	
	29.7	15.9	7.4	6.3	15,300	8.9	+154	
	36.3	15.4	7.6	5.7	20,200	12.0	+157	
20 1120	3.3	17.3	7.2	7.7	5,840	2.8	+166	
	9.9	16.7	7.3	7.3	8,060	4.2	+166	
	16.5	16.5	7.3	7.0	9,800	5.4	+166	
	23.1	16.3	7.4	6.7	12,060	6.7	+167	
	29.7	16.0	7.5	6.4	15,100	8.8	+167	
	36.3	15.3	7.6	5.7	22,000	13.0	+168	

TABLE 4B.--WATER-QUALITY FIELD DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
MAY AND AUGUST 1985 AND MAY AND JUNE 1986

SITE NAME TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)
MAY 8, 1985					
CALCASIEU RIVER AT BUOY 47 1330	1.6 45.2	25.9 25.2	8.2 ---	8.0 ---	36,300 37,100
MAY 9, 1985					
CALCASIEU RIVER AT BUOY 130 1815	1.6 17.2 32.3	26.1 24.0 23.3	6.7 ---	4.7 ---	5,220 14,000 31,700
CALCASIEU RIVER AT PETROLEUM REFINERY 1730	1.6 9.9 37.3	27.5 26.1 24.0	8.5 7.7 ---	11.1 7.3 ---	10,900 15,000 32,500
CALCASIEU RIVER AT INTRACOASTAL WATERWAY 1635	1.6 39.3	26.8 24.8	8.3 ---	11.0 ---	14,400 30,200
CALCASIEU RIVER AT BURTON LANDING 1055	1.6 3.3 34.3	25.5 24.4 24.4	7.6 ---	6.8 ---	4,570 15,000 31,800
MAY 10, 1985					
CALCASIEU RIVER ABOVE BAYOU SERPENT 1150	1.6 9.9	24.8 24.2	6.5 6.4	6.0 5.6	61 63
BAYOU SERPENT 1140	1.6 17.2	25.1 23.2	6.6 6.5	6.0 0.7	63 218
CALCASIEU RIVER BELOW BAYOU SERPENT 1130	1.6 20.1	24.6 23.4	6.6 6.5	6.0 3.4	62 190
CALCASIEU RIVER BELOW SALTWATER BARRIER 1250	1.6 17.2	25.2 23.8	6.8 6.9	4.3 1.8	5,570 15,500

TABLE 4B.--WATER-QUALITY FIELD DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
MAY AND AUGUST 1985 AND MAY AND JUNE 1986--CONTINUED

SITE NAME TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)
MAY 29, 1985					
CALCASIEU RIVER ABOVE BAYOU SERPENT 1630	1.6 18.2	27.9 26.0	6.8 6.2	9.1 6.4	63 62
BAYOU SERPENT 300 FEET ABOVE MOUTH 1735	1.6 16.2	27.4 24.5	6.6 6.0	8.6 0.6	59 117
WEST FORK CALCASIEU 1855	1.6 16.5 26.4 42.9	27.2 23.3 24.9 25.3	6.6 6.2 --- 6.5	6.2 0.3 0.3 0.4	363 502 4,160 8,250
MAY 30, 1985					
CALCASIEU RIVER AT SHIP CHANNEL NEAR BUOY 130 1700	1.6 13.2 26.4 42.9	27.9 27.5 26.5 24.6	7.6 7.2 7.2 7.2	8.1 5.5 1.1 0.4	5,730 7,680 20,000 25,700
CALCASIEU RIVER AT BUOY 130 1730	1.6 13.2	27.9 27.8	7.6 7.4	8.4 7.2	5,360 6,800
CALCASIEU RIVER AT BUOY 114 1615	1.6 20.1	29.3 28.7	8.5 8.4	9.2 8.1	13,100 13,500
CALCASIEU RIVER AT BAYOU D' INDE 1530	1.6 8.9	29.0 28.4	8.6 8.2	9.9 7.2	14,400 15,500
CALCASIEU RIVER AT PETROLEUM REFINERY 1435	1.6 28.0	27.9 26.3	8.2 7.5	7.4 0.8	17,100 23,600
CALCASIEU RIVER AT BURTON LANDING 1340	1.6 9.9	27.5 27.4	8.2 8.2	7.4 7.2	17,400 17,400
CALCASIEU RIVER AT DEVIL'S ELBOW 1315	1.6 32.1	27.5 27.0	8.2 8.0	7.7 6.1	16,100 17,900
CALCASIEU LAKE 1215	1.6	26.8	8.2	7.2	20,000
CALCASIEU RIVER AT BUOY 47 NEAR CAMERON 1100	1.6 9.9 19.8	27.1 27.1 27.0	8.0 8.0 8.1	4.8 4.7 5.0	34,500 34,500 34,600

TABLE 4B.--WATER-QUALITY FIELD DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
MAY AND AUGUST 1985 AND MAY AND JUNE 1986--CONTINUED

SITE NAME TIME	DEPTH (FEET)	TEMP (DEG C)	DO (MG/L)	SPEC COND (US/CM)	ORP (MV)
AUGUST 28, 1985					
CALCASIEU RIVER AT BUOY 130 1130	1.6	29.0	5.9	6,500	+300
	5.9	28.5	5.3	7,400	+190
	13.2	29.0	0.9	31,500	---
	35.3	30.0	0.4	40,000	-100
CALCASIEU RIVER AT BAYOU D'INDE 1630	1.6	29.5	7.4	12,000	+300
	9.9	30.0	1.0	31,000	+240
	20.1	30.0	0.6	40,000	+250
	45.2	30.0	2.1	42,500	+240
AUGUST 29, 1985					
CALCASIEU RIVER AT PETROLEUM REFINERY 0930	1.6	30.0	7.4	19,000	+360
	5.0	30.0	5.7	22,500	+400
	9.9	30.0	2.6	28,500	+380
	20.1	30.5	1.5	37,000	+280
	43.2	30.0	2.8	44,000	+320
CALCASIEU RIVER AT BURTON LANDING 1130	1.6	30.5	8.8	21,000	+400
	9.9	29.0	3.9	35,000	+320
	20.1	28.0	4.0	42,000	+260
	44.2	30.0	2.0	43,000	+300
	45.2	30.0	1.9	44,500	+160
AUGUST 30, 1985					
CALCASIEU LAKE 1100	1.6	31.5	---	31,000	+700
	4.0	30.0	---	31,400	+700

SITE NAME TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
MAY 19, 1986							
CALCASIEU RIVER AT BUOY 130 1600	1.6	24.4	6.7	3.7	4,300	1.9	+140
	5.0	24.1	6.8	3.3	5,160	2.3	+140
CALCASIEU RIVER 300 FEET DOWN- STREAM FROM BAYOU D'INDE 1530	3.6	28.3	7.6	7.9	10,600	5.3	+134

TABLE 4B.--WATER-QUALITY FIELD DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
MAY AND AUGUST 1985 AND MAY AND JUNE 1986--CONTINUED

SITE NAME TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
BAYOU D'INDE AT MOUTH 1550	3.3	26.7	7.7	8.0	8,800	4.6	+131
INDUSTRIAL OUT- FALL AT BAYOU D'INDE 1610	7.3	27.4	7.8	8.3	9,820	5.2	+091
INDUSTRIAL OUT- FALL AT BRIDGE 0.25 MILE ABOVE MOUTH 1630	8.2	35.0	7.3	6.2	12,900	7.1	+138
MAY 20, 1986							
INDUSTRIAL OUT- OUTAT LOCKPORT MARSH BRIDGE 0900	3.3	34.1	7.6	5.2	12,570	7.0	+184
CALCASIEU RIVER AT BAYOU D'INDE 1730	1.6 41.2	26.4 24.5	8.0 7.1	9.0 4.1	8,010 31,500	4.1 12.9	+114 +145
CALCASIEU RIVER AT BUOY 130 SHIP CHANNEL 1800	1.6 42.9	26.8 25.4	7.0 7.6	6.8 3.0	4,740 28,700	2.1 17.5	+158 +127
MAY 21, 1986							
CALCASIEU RIVER AT BURTON LANDING 1800	1.6 21.1	26.3 24.2	8.5 7.9	10.7 5.5	16,600 27,800	9.7 16.8	+141 +156
MAY 22, 1986							
CALCASIEU RIVER AT PETROLEUM REFINERY 1030	1.6 11.2	25.5 25.0	8.0 7.8	10.7 5.4	16,600 20,800	9.7 16.8	+141 +156

TABLE 4B.--WATER-QUALITY FIELD DATA, LOWER CALCASIEU RIVER, LOUISIANA,  
MAY AND AUGUST 1985 AND MAY AND JUNE 1986--CONTINUED

SITE NAME TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
JUNE 18, 1986							
CALCASIEU RIVER AT I-10 BRIDGE 1620	1.6 4.0 11.9 19.8 27.7 35.6 38.0	29.3 27.6 26.8 26.7 27.5 27.6 27.6	5.9 5.9 5.9 6.2 6.7 6.8 6.8	3.1 2.8 2.6 2.4 0.0 0.0 0.0	81 88 123 284 14,300 17,500 17,900	0.0 0.0 0.0 0.0 7.6 10.1 10.3	+212 +211 +198 +153 +040 +018 +008
CALCASIEU RIVER AT BUOY 114 1540	1.6 4.0 11.6 19.1 24.1 27.1 34.6 37.0	31.0 28.7 27.1 26.9 27.3 27.4 27.7 27.7	6.3 6.1 6.2 6.4 6.5 6.7 7.0 7.0	6.1 3.6 2.7 2.4 1.2 0.2 0.1 0.0	218 181 192 390 8,400 13,320 18,900 22,000	0.0 0.0 0.0 0.0 4.2 7.4 10.9 13.0	+203 +202 +186 +139 +150 +034 -002 -045
CALCASIEU RIVER 300 FEET UP- STREAM FROM BAYOU D' INDE 1450	1.6 4.0 11.9 19.8 27.7 35.6 38.0	29.5 28.0 27.5 27.4 27.7 27.8 27.8	6.2 6.1 6.2 6.3 6.8 7.1 7.1	4.1 3.0 2.5 2.0 1.0 0.8 0.0	375 736 1,380 2,340 12,900 23,000 24,000	0.0 0.0 0.2 1.3 7.1 13.7 14.4	+177 +184 +168 +108 +072 +052 +063
CALCASIEU RIVER AT PETROLEUM REFINERY 1400	1.6 4.0 11.9 19.8 27.7 35.6	29.1 28.2 27.9 27.7 27.8 27.8	6.2 6.3 6.4 6.6 7.0 7.4	4.1 3.5 3.1 2.0 0.7 0.0	791 1,100 1,570 6,450 17,800 28,800	0.0 0.2 0.3 2.9 10.4 17.6	+163 +167 +155 +117 +039 -054
CALCASIEU RIVER AT BURTON LANDING 1245	1.6 3.6 11.2 18.8 26.4 34.0 36.0	29.4 29.2 28.0 27.8 27.9 27.8 27.8	6.5 6.5 6.5 7.0 7.4 7.6 7.6	4.4 4.2 2.7 1.6 0.4 0.0 0.3	2,240 2,240 3,470 13,520 27,200 32,400 32,300	0.7 0.7 1.4 7.4 16.6 20.2 20.1	+154 +150 +140 +089 +041 +021 +099

TABLE 5---PARTICLE-SIZE DISTRIBUTION OF BOTTOM MATERIAL, SUSPENDED-SEDIMENT CONCENTRATIONS, AND MISCELLANEOUS DISCHARGE MEASUREMENTS DATA FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, 1984-87

[PERCENT FINER BY WEIGHT THAN INDICATED SIZE, IN MILLIMETERS (MM); MG/L, MILLIGRAMS PER LITER; DASHES (---), NOT RECORDED]

PARTICLE-SIZE DISTRIBUTION OF BOTTOM MATERIAL, MAY 1985

SIZE	<sup>1</sup> SITE 1	2	3	4	5	6	7	8	9	10
1.00	100	100	99.8	100	100	100	100	100	100	100
0.50	96.6	100	90.4	100	100	100	100	100	100	100
0.35	59.5	78.6	34.5	100	99.7	100	99.8	99.8	100	99.6
0.25	11.2	75.8	3.1	98.8	95.7	99.8	95.8	98.4	99.8	98.2
0.177	5.0	70.8	1.3	95.8	88.8	98.6	84.4	93.4	97.2	92.6
0.125	2.4	69.0	0.5	91.2	81.9	97.2	74.0	81.2	90.0	81.8
0.088	1.8	67.6	0.3	81.8	72.9	95.0	61.6	65.8	80.4	65.2
0.074	1.6	66.6	0.3	77.6	67.3	93.6	65.4	58.4	74.6	57.2
0.0625	1.4	65.8	0.2	75.6	64.0	92.2	64.4	54.8	70.8	54.0
0.0312	---	32.6	---	46.9	52.1	96.1	42.1	41.2	43.4	43.7
0.0156	---	25.5	---	33.5	35.8	82.0	31.3	27.7	28.7	39.9
0.0078	---	18.8	---	31.3	32.1	30.6	24.6	23.9	24.9	37.7
0.0039	---	15.3	---	22.7	22.7	10.2	19.2	20.7	21.4	31.3
0.00195	---	9.6	---	18.5	18.5	9.5	14.1	17.9	18.2	23.0

- <sup>1</sup>SITE 1. BAYOU SERPENT  
 2. WEST FORK CALCASIEU  
 3. CALCASIEU RIVER EAST OF MOSS BLUFF  
 4. CALCASIEU RIVER AT BUOY 130  
 5. CALCASIEU RIVER AT BAYOU D'INDE  
 6. CALCASIEU RIVER AT PETROLEUM REFINERY  
 7. CALCASIEU RIVER AT DEVIL'S ELBOW  
 8. CALCASIEU RIVER AT BURTON LANDING  
 9. CALCASIEU LAKE  
 10. CALCASIEU RIVER AT BUOY 47

AUGUST 1985

SIZE	<sup>2</sup> SITE 1	2	3	4	5	<sup>3</sup> SITE 1	2	3
1.00	100	100	100	100	100	100	100	100
0.50	100	100	100	100	100	100	100	100
0.35	97.6	99.6	98.6	98.6	100	100	100	99.2
0.25	91.8	96.6	97.6	88.8	100	99.8	98.6	92.2
0.177	81.0	91.4	84.2	77.8	99.6	99.6	93.8	80.0
0.125	76.2	82.6	78.4	73.2	98.6	98.2	87.8	68.0
0.088	70.2	72.0	71.4	65.0	95.4	95.4	77.2	60.0
0.074	66.6	65.8	68.2	59.8	91.6	90.4	73.0	55.4
0.0625	64.8	64.8	66.2	57.8	88.8	83.2	69.6	51.8
0.0312	54.5	49.7	54.9	30.9	67.6	52.6	56.8	51.8
0.0156	44.2	35.5	46.5	24.9	50.4	41.5	40.8	34.5
0.0078	36.0	24.0	38.0	21.7	44.3	33.2	36.7	30.0
0.0039	29.0	15.3	15.6	16.3	37.6	28.7	27.7	24.3
0.00195	20.4	12.8	11.2	13.4	24.5	24.9	21.4	18.5

- <sup>2</sup>SITE 1. CALCASIEU RIVER AT BUOY 130  
 2. CALCASIEU RIVER AT BAYOU D'INDE  
 3. CALCASIEU RIVER AT PETROLEUM REFINERY  
 4. CALCASIEU RIVER AT BURTON LANDING  
 5. CALCASIEU LAKE

- <sup>3</sup>SITE 1. CALCASIEU RIVER AT RAILROAD BRIDGE  
 2. CALCASIEU RIVER AT PETROLEUM REFINERY  
 3. CALCASIEU RIVER AT BURTON LANDING

TABLE 5.--PARTICLE-SIZE DISTRIBUTION OF BOTTOM MATERIAL, SUSPENDED-SEDIMENT CONCENTRATIONS, AND MISCELLANEOUS DISCHARGE MEASUREMENTS DATA FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, 1984-87--CONTINUED

[PERCENT FINER BY WEIGHT THAN INDICATED SIZE, IN MILLIMETERS]

INCREMENTAL PARTICLE-SIZE DISTRIBUTION OF BOTTOM MATERIAL FROM CORINGS OF  
THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 19, 1986

CALCASIEU RIVER AT BAYOU D'INDE

CALCASIEU RIVER AT PETROLEUM REFINERY

CORE SECTION 1. 0.1 - 0.5  
(IN FEET) 2. 0.6 - 1.0  
3. 1.1 - 1.5  
4. 1.6 - 2.0  
5. 2.1 - 2.4

CORE SECTION: 1. 0.1 - 0.3  
(IN FEET) 2. 0.4 - 0.6  
3. 0.7 - 0.9  
4. 1.0 - 1.2

SIZE	CORE SECTION 1					CORE SECTION 1			
	2	3	4	5		2	3	4	
1.00	100	100	100	100	100	100	100	100	100
0.50	100	100	100	99.8	99.8	100	100	100	100
0.35	99.6	99.8	99.6	98.2	98.2	100	100	100	100
0.25	94.6	98.0	96.8	94.4	79.0	100	100	100	100
0.177	79.6	94.0	91.4	86.0	35.2	99.0	100	100	100
0.125	73.6	92.2	90.0	82.0	26.6	93.6	100	100	100
0.088	69.2	90.4	88.6	75.4	23.0	80.8	100	100	100
0.074	67.0	89.4	88.0	70.8	22.0	73.8	100	100	100
0.0625	65.4	88.4	87.4	67.4	21.4	69.0	100	100	100
0.0312	53.6	79.1	63.2	49.1	19.4	46.6	55.8	77.2	35.7
0.0156	42.7	75.0	54.6	39.9	16.9	37.9	43.1	70.3	26.8
0.0078	35.7	61.2	45.3	34.5	15.3	30.3	37.0	62.7	21.4
0.0039	28.7	52.9	38.6	29.0	13.4	25.2	30.6	53.8	16.3
0.00195	20.1	9.6	27.5	23.3	12.1	22.0	24.9	44.9	12.8

CONCENTRATION AND PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

CONCENTRATIONS, IN MG/L PERCENT FINE BY WEIGHT THAN INDICATED SIZE, IN MM

DISTANCE (FEET)	SILT AND CLAY	TOTAL	0.0625	0.0312	0.0156	0.0078	0.0039	0.00195
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DISTANCE FROM LEFT BANK OF CALCASIEU RIVER AT BUOY 130, NOVEMBER 1, 1985

81	13	48	61	---	---	---	---	---
120	15	42	57	---	---	---	---	---
160	17	40	57	---	---	---	---	---
210	28	44	72	100	58.2	55.7	50.9	48.4
250	25	42	67	100	59.0	56.5	51.3	45.6
330	27	46	73	100	93.5	86.0	75.2	71.0
370	58	42	100	100	83.2	77.8	66.7	55.3
422	32	59	91	100	60.8	56.8	50.7	45.5
486	33	40	73	---	---	---	---	---
526	19	37	56	---	---	---	---	---

DISTANCE FROM LEFT BANK OF CALCASIEU RIVER AT PETROLEUM REFINERY, NOVEMBER 1, 1985

290	5	66	71	100	91.7	86.1	77.5	68.5	59.2
440	15	68	83	100	80.8	74.7	67.1	61.0	51.3
590	19	139	158	100	81.4	73.6	---	---	---
700	17	141	158	100	76.7	72.8	61.6	52.6	43.0

TABLE 5.--PARTICLE-SIZE DISTRIBUTION OF BOTTOM MATERIAL, SUSPENDED-SEDIMENT CONCENTRATIONS, AND MISCELLANEOUS DISCHARGE MEASUREMENTS DATA FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, 1984-87--CONTINUED

DISTANCE (FEET)	CONCENTRATIONS, IN MG/L			PERCENT FINER BY WEIGHT THAN INDICATED SIZE, IN MM					
	SAND	CLAY	TOTAL	0.0625	0.0312	0.0156	0.0078	0.0039	0.00195
DISTANCE FROM LEFT BANK OF CALCASIEU RIVER AT BURTON LANDING, NOVEMBER 1, 1985									
175	7	77	84	100	87.5	86.2	88.9	81.8	75.7
350	19	198	217	100	84.3	77.0	67.5	59.3	60.2
525	16	190	206	---	---	---	---	---	---
620	13	180	193	100	88.1	79.2	71.0	60.3	52.4
DEPTH, IN FEET; TOTAL CONCENTRATIONS, IN MG/L									
CALCASIEU RIVER AT BURTON LANDING			CALCASIEU RIVER AT RAILROAD BRIDGE			CALCASIEU RIVER AT BAYOU D'INDE			
DEPTH	TOTAL		DEPTH	TOTAL		DEPTH	TOTAL		
1	9		3.2	59		3.8	8		
34	21		9.6	52		11.4	6		
			16.0	18		19.0	10		
			22.4	8		26.6	15		
			28.8	3		34.2	15		
BAYOU D'INDE AT INDUSTRIAL OUTFALL			CALCASIEU RIVER AT PETROLEUM REFINERY			CALCASIEU RIVER AT BURTON LANDING			
DEPTH	TOTAL		DEPTH	TOTAL		DEPTH	TOTAL		
0.8	11		0.9	9		3.7	41		
2.4	13		2.7	10		11.1	24		
4.0	12		4.5	12		18.5	17		
5.6	10		6.3	11		25.9	13		
7.2	12		8.1	13		33.3	20		

TABLE 5.--PARTICLE-SIZE DISTRIBUTION OF BOTTOM MATERIAL, SUSPENDED-SEDIMENT CONCENTRATIONS,  
AND MISCELLANEOUS DISCHARGE MEASUREMENTS DATA FROM THE LOWER CALCASIEU RIVER AND BAYOU  
D'INDE AREA, LOUISIANA, 1984-87--CONTINUED

MISCELLANEOUS DISCHARGE MEASUREMENTS

[DISCHARGE IN CUBIC FEET PER SECOND, NEGATIVE NUMBERS INDICATE UPSTREAM FLOW]

LOWER CALCASIEU RIVER AT RAILROAD BRIDGE AT LAKE CHARLES, LOUISIANA, MARCH 1985 TO JULY 1987

DATE	DISCHARGE	DATE	DISCHARGE
03-21-85	21,700	02-06-87	717
04-11-85	-960	02-10-87	-1,610
05-09-85	-924	02-11-87	3,230
06-05-85	-3,050	02-23-87	4,340
07-30-85	916	03-09-87	-1,470
11-01-85	71,000	03-10-87	15,800
05-01-86	-2,370	03-17-87	6,810
05-01-86	-1,750	04-08-87	593
05-02-86	2,910	04-21-87	-1,860
05-02-86	1,990	04-22-87	1,600
05-02-86	691	05-05-87	-1,710
06-18-86	-887	05-06-87	1,950
01-13-87	6,330	05-19-87	-383
01-13-87	8,310	06-03-87	6,010
01-13-87	7,470	06-15-87	6,520
01-13-87	4,390	07-14-87	5,540
01-13-87	-1,130	07-15-87	3,070
01-13-87	-408		

LOWER CALCASIEU RIVER AT BURTON LANDING, LOUISIANA, OCTOBER 1984 TO JANUARY 1987

10-24-84	45,200	05-01-86	-4,330
03-21-85	30,500	05-01-86	-33,000
04-10-85	-32,300	05-02-86	15,500
04-11-85	-19,200	05-02-86	9,880
05-09-85	-30,000	05-02-86	7,030
06-05-85	-29,400	01-13-87	23,300
07-29-85	7,790	01-13-87	6,760
08-27-85	-2,140	01-13-87	-8,100
05-01-86	-18,400	01-13-87	-481

MISCELLANEOUS DISCHARGE MEASUREMENTS OF THE BAYOU D'INDE AREA, LOUISIANA,  
APRIL 1987 TO JUNE 1988

SITE NAME	DATE	DISCHARGE
INDUSTRIAL OUTFALL ABOVE I-210 BRIDGE	04-15-87	253
INDUSTRIAL OUTFALL ABOVE I-210 BRIDGE	09-17-87	358
INDUSTRIAL OUTFALL AT LOCKPORT MARSH BRIDGE	09-17-87	394
BAYOU D'INDE 0.5 MILE BELOW INDUSTRIAL OUTFALL	09-17-87	356
INDUSTRIAL OUTFALL AT BRIDGE 0.25 MILE ABOVE BAYOU D'INDE	06-21-88	333
BAYOU D'INDE 0.5 MILE BELOW INDUSTRIAL OUTFALL	06-21-88	975

TABLE 6.-CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985

[ < : LESS THAN ]

301832093065300 - CALCASIEU RIVER 3.9 MILES EAST OF MOSS BLUFF, LOUISIANA



TABLE 6.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

301824093063600 - BAYOU SERPENT 4.2 MILES EAST OF MOSS BLUFF, LOUISIANA

NITRO-GEN, AM-MONIA + ORGANIC	NITRO-GEN, NH <sub>4</sub> + ORG.	PHOS-PHOROUS	PHOS-PHOROUS	PHOS-PHOROUS	PHOS-PHOROUS	PHOS-PHOROUS	PHOS-PHOROUS	ARSENIC TOTAL	BARIUM, IN BOT-TOTAL		
TOT IN DIS.	TOT IN BOT MAT	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	TOTAL	TOM MA-RECOV-ERABLE		
DATE (MG/L AS N)	DATE (MG/KG AS N)	(MG/L AS P)	(MG/L AS P)	(MG/L AS P)	(MG/L AS P)	(MG/KG AS P)	(UG/L AS AS)	(UG/L AS AS)	(UG/G AS AS)	(UG/L AS BA)	
MAY 1985 29...	0.6	0.2	0.07	0.04	0.02	360	<1	<1	6	<100	
BARIUM, RECOV. FM BOT-TOTAL	CADMUM, RECOV. FM BOT-TOTAL	CADMUM, RECOV. FM BOT-TOTAL	CADMUM, RECOV. FM BOT-TOTAL	CADMUM, RECOV. FM BOT-TOTAL	CADMUM, RECOV. FM BOT-TOTAL	CADMUM, RECOV. FM BOT-TOTAL	CADMUM, RECOV. FM BOT-TOTAL	COBALT, TOTAL	COBALT, TOTAL	COPPER, TOTAL	
BARIUM, RECOV-ERABLE (UG/L AS BA)	TOM MA-TERIAL (UG/G AS EA)	DIS-SOLVED (UG/L AS CD)	SOLVED (UG/L AS CD)	TERIAL (UG/G AS CD)	TERIAL (UG/L AS CR)	SOLVED (UG/L AS CR)	SOLVED (UG/L AS CR)	TOM MA-TERIAL (UG/L AS CO)	TOM MA-TERIAL (UG/L AS CO)	DIS-SOLVED (UG/L AS CU)	RECOV-ERABLE (UG/L AS CU)
DATE (UG/L AS BA)	MAY 1985 29...	<100	30	1	<1	<1	<10	<10	20	1	<1
COPPER, RECOV. FM BOT-TOTAL	IRON, RECOV. FM BOT-TOTAL	IRON, RECOV. FM BOT-TOTAL	IRON, RECOV. FM BOT-TOTAL	IRON, RECOV. FM BOT-TOTAL	IRON, RECOV. FM BOT-TOTAL	IRON, RECOV. FM BOT-TOTAL	IRON, RECOV. FM BOT-TOTAL	LEAD, TOTAL	LEAD, TOTAL	MANGANESE, TOTAL	MANGANESE, RECOV.
COPPER, RECOV-ERABLE (UG/L AS CU)	TOM MA-TERIAL (UG/G AS CU)	DIS-SOLVED (UG/L AS CU)	SOLVED (UG/L AS FE)	SOLVED (UG/G AS FE)	SOLVED (UG/L AS FE)	SOLVED (UG/L AS FE)	SOLVED (UG/L AS FE)	TOM MA-TERIAL (UG/L AS PB)	TOM MA-TERIAL (UG/L AS PB)	DIS-SOLVED (UG/L AS MN)	RECOV-FM BOT-TOTAL
DATE (UG/L AS CU)	MAY 1985 29...	3	<1	15.00	170	1900	9	2	10	150	30
MERCURY RECOV. FM BOT-TOTAL	SELENIUM, RECOV. FM BOT-TOTAL	SELENIUM, RECOV. FM BOT-TOTAL	SELENIUM, RECOV. FM BOT-TOTAL	SELENIUM, RECOV. FM BOT-TOTAL	SELENIUM, RECOV. FM BOT-TOTAL	SELENIUM, RECOV. FM BOT-TOTAL	SELENIUM, RECOV. FM BOT-TOTAL	ZINC, TOTAL	ZINC, TOTAL	ZINC, RECOV.	CARBON, ORGANIC SUS-PENDED
MERCURY RECOV-ERABLE (UG/L AS HG)	TOM MA-TERIAL (UG/L AS SE)	DIS-SOLVED (UG/L AS SE)	SOLVED (UG/L AS AG)	DIS-SOLVED (UG/L AS ZN)	DIS-SOLVED (UG/L AS ZN)	TOM MA-TERIAL (UG/G AS ZN)	TOM MA-TERIAL (UG/L AS C)				
DATE (UG/L AS HG)	MAY 1985 29...	<0.1	0.06	<1	<1	<1	<1	20	10	1	7.2
CARBON, INORG + ORGANIC	CARBON, ORGANIC	ACE-	ANTRA-	FLUOR-	BENZO K	BENZO A-	PYRENE	TOTAL	BIS	BIS (2-CHLORO-ISO-PROPYL)	
TOT. IN BOTTOM	TOT. IN BOT MAT	TOT. IN BOT MAT	YLINE	AN-	FLUOR-AN-	AN-THENE	THENE	TOTAL (UG/L)	2-	CHLORO-ETHYL	
DATE (GM/KG AS C)	DATE (G/KG AS C)	(MG/KG AS C)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	ETHER	METHANE				
MAY 1985 29...	16	0.1	16	<5	<5	<10	<10	<10	<5	<5	<5

TABLE 6.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

		N-BUTYL BENZYL PHTHALATE TOTAL (UG/L)	DIETHYL PHTHALATE TOTAL (UG/L)	DI-METHYL PHTHALATE TOTAL (UG/L)	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	HEXA-CYCLO-PENTADIENE TOTAL (UG/L)	HEXA-CHLORO-ETHANE TOTAL (UG/L)	INDENO-CD TOTAL (UG/L)	ISO-PROPYLENE TOTAL (UG/L)	N-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)	
DATE	DATE	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
MAY 1985 29...	MAY 1985 29...	<5	<10	<5	<5	<5	<5	<5	<10	<5	<5	
		N-NITRO-SODI-PHENY-LAMINE TOTAL (UG/L)	N-NITRO-METHYLAMINE TOTAL (UG/L)	PARA-CHLOROMETA-CRESOL TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	PYRENE TOTAL (UG/L)	BENZO[ <i>A</i> ]PERYL ANTHRACENE TOTAL (UG/L)	INDENO-1,2-EINE TOTAL (UG/L)	1,2-DIBENZ-CHLOROPHENANTHERENE TOTAL (UG/L)	ISO-CHLOROPHENENE TOTAL (UG/L)	N-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)	
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
		1,4-DI-CHLOROBENZENE TOTAL (UG/L)	2-CHLORONAPHTHALENE TOTAL (UG/L)	2-NITRO-PHENOL TOTAL (UG/L)	2-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-CHLOROPHENOL TOTAL (UG/L)	2,4-DI-METHYL-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
		4-BROMOPHENYL ETHER TOTAL (UG/L)	4-NITRO-PHENOL TOTAL (UG/L)	4,6-DINITRO-CRESOL TOTAL (UG/L)	PHENOL (C6H <sub>5</sub> O) TOTAL (UG/L)	NAPHTH-ALENE TOTAL (UG/L)	PENTA-CHLOROPHENOL TOTAL (UG/L)	HEXYL-HEXXYL TOTAL (UG/L)	DI-N-BUTYL-PHTHALATE TOTAL (UG/L)	HEXA-CHLOROPHENENE TOTAL (UG/L)	HEXA-CHLOROPHENENE TOTAL (UG/L)	
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	
		301552093123500 - WEST FORK CALCASIEU RIVER 1.0 MILE NORTHWEST OF GOOSPORT, LOUISIANA										
		SOLIDS, VOLATILE IN BOTTOM MA-TERIAL (MG/KG)	NITRO-GEN, NO <sub>2</sub> +NO <sub>3</sub> DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO <sub>2</sub> +NO <sub>3</sub> TOT. IN AMMONIA BOT MAT (MG/L AS N)	NITRO-GEN, NO <sub>2</sub> +NO <sub>3</sub> TOT. IN AMMONIA BOT MAT (MG/L AS N)	NITRO-AMMONIA TOT. IN BOT. SOLVED (MG/L AS N)	NITRO-AMMONIA TOT. IN BOT. SOLVED (MG/L AS N)	NITRO-AMMONIA TOT. IN BOT. SOLVED (MG/L AS N)	NITRO-AMMONIA TOT. IN BOT. SOLVED (MG/L AS N)	NITRO-AMMONIA TOT. IN BOT. SOLVED (MG/L AS N)	NITRO-AMMONIA TOT. IN BOT. SOLVED (MG/L AS N)	
		(MG/KG)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	
		MAY 1985 29...	1845	35300	0.20	0.14	<2.0	0.16	0.16	12	0.6	0.7

NITRO- GEN, NH <sub>4</sub> + ORG. TOT IN BOT MAT (MG/KG AS N)	PHOS- PHOROUS TOTAL (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS TOTAL IN BOT. MAT. (MG/KG AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/L AS BA)	BARIUM, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/G AS BA)	COPPER, COPPER, FM BOT- TOM MA- TERIAL (UG/G AS CD)
MAY 1985 29...	770	0.06	0.02	0.02	260	<1	<1	4	<100 <100
BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	CADMUM TOTAL DIS- SOLVED (UG/L AS CD)	CADMUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CADMUM RECOV. FM BOT- TOM MA- TERIAL (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, FM BOT- TOM MA- TERIAL (UG/G AS CU)
MAY 1985 29...	40	1	<1	<1	<10	<10	30	3	1 5 2 3
IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS FE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/G AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/G AS MN)	MERCURY, TOTAL RECOV- ERABLE (UG/G AS HG)
MAY 1985 29...	1100	250	2200	8	9	10	380	310	<0.1 340 0.03
SELF- NIUM, TOTAL (UG/L AS SE)	SELF- NIUM, DIS- SOLVED (UG/L AS AG)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	CARBON, ORGANIC SUB- PENDED (MG/L AS C)	CARBON, ORGANIC SUB- PENDED (MG/L AS C)	CARBON, ORGANIC TOT IN BOT MAT (GM/KG AS C)
MAY 1985 29...	<1	<1	<1	<1	10	20	9	8.9	0.5 11 0.1
CARBON, INORG + ORGANIC TOT. IN BOT MAT (MG/KG AS C)	ACE- NAPHTH- YLENE TOTAL (UG/L)	ACE- NAPHTH- YLENE TOTAL (UG/L)	ANTHRA- CENE TOTAL (UG/L)	BENZO K FLUOR- AN- THENE TOTAL (UG/L)	BENZO K FLUOR- AN- THENE TOTAL (UG/L)	BENZO A- PYRENE TOTAL (UG/L)	BIS 2- CHLORO- ETHYL ETHER TOTAL (UG/L)	BIS 2- CHLORO- ETHYL ETHER TOTAL (UG/L)	BIS (2- CHLORO- ISO- BENZYL PROPYL) PHTHAL- ATE TOTAL (UG/L)
MAY 1985 29...	11	<5	<5	<5	<10	<10	<10	<5	<5 <5 <5 <5

TABLE 6.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

		DI-METHYL-PHTHALATE TOTAL (UG/L)	DI-METHYL-PHTHALATE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	HEXA-CHLORO-PENTENE TOTAL (UG/L)	HEXA-CHLORO-PENTENE TOTAL (UG/L)	INDENO-(1,2,3-CD) PYRENE TOTAL (UG/L)	INDENO-(1,2,3-CD) PYRENE TOTAL (UG/L)	N-SODIUM PROPYL-AMINE TOTAL (UG/L)	N-SODIUM PROPYL-AMINE TOTAL (UG/L)
DATE	DATE	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
MAY 1985 29...	<10	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5
N-NITRO-SODI-METHYL-LAMINE TOTAL (UG/L)	PARA-CHLORO-META-CRESOL TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	PYRENE TOTAL (UG/L)	INDENO-(1,2,3-CD) PYRENE TOTAL (UG/L)	INDENO-(1,2,3-CD) PYRENE TOTAL (UG/L)	BENZO-A-ANTHRACENE TOTAL (UG/L)	BENZO-A-ANTHRACENE TOTAL (UG/L)	1,2-DIBENZ-CHLOROPHENONE TOTAL (UG/L)	1,2-DIBENZ-CHLOROPHENONE TOTAL (UG/L)	1,3-DI-ANTHRA-BENZENE TOTAL (UG/L)	1,3-DI-ANTHRA-BENZENE TOTAL (UG/L)
DATE	DATE	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
MAY 1985 29...	<5	<5	<30	<5	<5	<10	<5	<5	<5	<10	<5
1,4-DI-CHLOROBENZENE TOTAL (UG/L)	2-CHLORONAPHTHALENE TOTAL (UG/L)	2-NITRO-PHENOL TOTAL (UG/L)	2-NITRO-PHTHALATE TOTAL (UG/L)	2,4-DI-CHLOROPHENOL TOTAL (UG/L)	2,4-DI-CHLOROPHENOL TOTAL (UG/L)	2,4-DI-METHYL-PHENOL TOTAL (UG/L)	2,4-DI-METHYL-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,6-DI-CHLORONITROBENZENE TOTAL (UG/L)	2,6-DI-CHLORONITROBENZENE TOTAL (UG/L)
DATE	DATE	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
MAY 1985 29...	<5	<5	<5	<5	<10	<5	<5	<5	<20	<20	<5
4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L)	4-CHLOROPHENYL PHENOL TOTAL (UG/L)	4,6-DINITRO-CRESOL TOTAL (UG/L)	4,6-DINITRO-PHENOL TOTAL (UG/L)	4-NAPHTH-5(1H)-ALENE TOTAL (UG/L)	4-NAPHTH-5(1H)-ALENE TOTAL (UG/L)	PENTA-CHLOROPHENOL TOTAL (UG/L)	PENTA-CHLOROPHENOL TOTAL (UG/L)	PHTHALATE TOTAL (UG/L)	PHTHALATE TOTAL (UG/L)	HEXYL-BUTYL ATE TOTAL (UG/L)	HEXYL-BUTYL ATE TOTAL (UG/L)
DATE	DATE	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
MAY 1985 29...	<5	<5	<30	<30	<5	<5	<30	<5	<5	<5	<5
301404093144800 - CALCASIEU RIVER AT BUOY 130 AT LAKE CHARLES, LOUISIANA											
SOLIDS, VOLATILE IN BOTTOM	NITRO-GEN, NO <sub>2</sub> +NO <sub>3</sub> TOTAL	NITRO-GEN, NO <sub>2</sub> +NO <sub>3</sub> DIS-SOLVED	NITRO-GEN, NO <sub>2</sub> +NO <sub>3</sub> TOT. IN BOT. MAT.	NITRO-AMMONIA TOTAL	NITRO-AMMONIA DIS-SOLVED	NITRO-AMMONIA TOTAL	NITRO-AMMONIA TOTAL	NITRO-AMMONIA IN BOT. MAT.	NITRO-AMMONIA IN BOT. MAT.	NITRO-AMMONIA TOTAL	NITRO-AMMONIA TOTAL
DATE	TIME	(MG/KG)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/KG AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)
MAY 1985 29...	1930	57200	0.20	0.17	<2.0	0.17	0.17	0.20	0.20	0.7	0.6



TABLE 6.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

	BIS (2-CHLORO-ETHoxy) METHANE TOTAL (UG/L)	BIS (2-CHLORO-ISO-PHENYL) ETHER TOTAL (UG/L)	N-BUTYL BENZYL PHTHAL-ATE TOTAL (UG/L)	CHLORO-BENZENE ETHANE TOTAL (UG/L)	CHRY-SENE TOTAL (UG/L)	DIEETHYL-PHTHAL-ATE TOTAL (UG/L)	DI-METHYL-PHTHAL-ATE TOTAL (UG/L)	FLUOR-BENZENE TOTAL (UG/L)	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	
DATE	MAY 1985	29...	DATE	MAY 1985	29...	DATE	MAY 1985	29...	DATE	MAY 1985	29...
	<5	<5		<5	<5		<5	<5		<5	<5
HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	HEXA-CHLORO-ETHANE TOTAL (UG/L)	INDENO (1,2,3-CD) ISO-PYRENE TOTAL (UG/L)	CHLORO-BROMIDE TOTAL (UG/L)	CHRY-SENE TOTAL (UG/L)	DIEETHYL-PHTHAL-ATE TOTAL (UG/L)	DI-METHYL-PHTHAL-ATE TOTAL (UG/L)	DI-NITRO-SODIUM PROPYL-AMINE TOTAL (UG/L)	N-NITRO-LAMINE TOTAL (UG/L)	-SODIUM PHENYL-LAMINE TOTAL (UG/L)	NITRO-BENZENE TOTAL (UG/L)	PARA-CHLORO-META-CRESOL TOTAL (UG/L)
DATE	MAY 1985	29...	DATE	MAY 1985	29...	DATE	MAY 1985	29...	DATE	MAY 1985	29...
	<5	<5		<5	<10		<5	<3		<5	<30
PHENAN-THRENE TOTAL (UG/L)	PHENAN-THRENE PYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L)	BENZO A ANTHRACENE TOTAL (UG/L)
DATE	MAY 1985	29...	DATE	MAY 1985	29...	DATE	MAY 1985	29...	DATE	MAY 1985	29...
	<5	<5		<3	<3		<3	<3		<3	<5
1,2-DI-CHLORO-BENZENE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-TRANSIDI-CHLORO-ETHENE TOTAL (UG/L)	1,2,4-DIBENZENE TOTAL (UG/L)	1,2,4,6-ANTHRA-CENE TOTAL (UG/L)	1,3-DI-CHLORO-PROFENE TOTAL (UG/L)	1,3-DI-CHLORO-BENZENE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	2-CHLORO-NAPHTHALENE TOTAL (UG/L)
DATE	MAY 1985	29...	DATE	MAY 1985	29...	DATE	MAY 1985	29...	DATE	MAY 1985	29...
	<5	<3		<3	<5		<10	<3		<5	<5
2-NITRO-PHENOL TOTAL (UG/L)	2-NITRO-PHENOL TOTAL (UG/L)	DI-N-OCTYL-PHTHAL-ATE TOTAL (UG/L)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L)	2,4-DI-METHYL-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4,-DI-NITRO-PHENOL TOTAL (UG/L)	2,6-DI-CHLORO-TOLUENE TOTAL (UG/L)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L)	4-BROMO-PHENYL ETHER TOTAL (UG/L)	4-CHLOROPHENYL ETHER TOTAL (UG/L)
DATE	MAY 1985	29...	DATE	MAY 1985	29...	DATE	MAY 1985	29...	DATE	MAY 1985	29...
	<5	<10		<5	<5		<5	<20		<5	<5

				BIS(2-ETHYLHEXYL)PHTHALATE	DI-N-BUTYLPHthalate	VINYLCHLORIDE	TRI-CHLOROETHYL-ENE	HEXA-CHLOROBUTENE
4,6-DINITRO- -ORTHO-CRESOL	DI-CHLORO- FLUORO-METHANE	PHENOL (C6H-5OH)	NAPHTH- ALENE	PENTA-CHLOROPHENOL	BUTYL-ATE	CHLORO-RIDE	CHLORO-ADENE	CHLORO-BUTENE
DATE	DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
MAY 1985 29...	MAY 1985 30...	<30	<3	<5	<5	<30	<5	<5
		301240093153000 - CALCASIEU RIVER AT BUOY 114 AT LAKE CHARLES, LOUISIANA						
SOLIDS, VOLA-TILE IN BOTTOM	NITRO-GEN, NO2+NO3 TOTAL MA-TERIAL (MG/KG)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOT. IN BOT MAT (MG/L AS N)	NITRO-AMMONIA TOTAL SOLVED (MG/L AS N)	NITRO-AMMONIA DIS-SOLVED TOTAL (MG/L AS N)	NITRO-AMMONIA IN BOT. SOLVED MAT. (MG/L AS N)	NITRO-AMMONIA TOTAL SOLVED MAT. (MG/L AS N)	NITRO-AMMONIA TOTAL SOLVED MAT. (MG/L AS N)
DATE	TIME							
MAY 1985 30...	1630	47600	<0.10	<0.10	<2.0	0.07	0.10	3.8
				ARSENIC	ARSENIC	BARIUM,	Cadmium	CADMUM
PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	TOTAL IN BOT. MAT. (MG/KG AS P)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	TOTAL IN BOT- TOM MA- TERIAL (UG/G AS BA)	BARIUM, DIS-SOLVED (UG/L AS BA)	RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)
DATE	DATE							
MAY 1985 30...	0.04	0.02	180	<1	<1	4	<100	<100
CHRO-MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT- TERIAL (UG/L AS CR)	COBALT, RECOV- ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, RECOV- ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	COPPER, TOM MA- TERIAL (UG/G AS FE)	COPPER, TOM MA- TERIAL (UG/L AS FE)	COPPER, TOM MA- TERIAL (UG/L AS FE)
DATE	DATE							
MAY 1985 30...	10	10	30	2	<1	6	5	4
LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, FM BOT- TERIAL (UG/G AS PB)	MANGANESE, RECOV- ERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MERCURY, RECOV. FM BOT- TERIAL (UG/G AS HG)	MERCURY, RECOV. TOM MA- TERIAL (UG/L AS HG)	SELENIUM, RECOV- ERABLE (UG/L AS SE)	SELENIUM, RECOV- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
DATE	DATE							
MAY 1985 30...	8	10	110	<10	260	<0.1	0.06	<1
						<1	<1	<1
								10

TABLE 6.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

	ZINC, RECOV. FM BOT- TOM MA- SOLVED (UG/L AS ZN)	CARBON, ORGANIC SUS- PENDED	CARBON, ORGANIC TOT. IN BOTTOM	CARBON, ORGANIC TOT. IN MAT.	CARBON, ORGANIC TOT. IN (GM/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (KG/KG AS C)	CARBON, INORG + ORGANIC TOT. IN BOT MAT (MG/KG AS C)	DI- CHLORO- BROMO- FORM- TOTAL (UG/L)	CARBON- TETRA- CHLORO- BROMO- FORM- TOTAL (UG/L)
DATE	MAY 1985	10	10	6.7	1.3	6.1	0.1	6.2	<3
	30...							<3	<3
		BIS CHLORO-DI-BROMO-METHANE	CHLORO-FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	NAPHTH-YLENE TOTAL (UG/L)	ACE-NAPHTH-ENE TOTAL (UG/L)	ANTHRA-CENE TOTAL (UG/L)	BENZO K
DATE	MAY 1985	<3	3.3	<3	<3	<5	<5	<5	BENZO B
	30...								BENZO A
		BIS (2-CHLORO-ISO-ETHOXY) PROPYL	CHLOROPHTHAL-ATE TOTAL (UG/L)	CHLOROBENZENE TOTAL (UG/L)	CHLOROETHANE TOTAL (UG/L)	CHRYSENE TOTAL (UG/L)	DIETHYL-PHTHAL-ATE TOTAL (UG/L)	FLUOR-AN-THENE TOTAL (UG/L)	CHLORO-ETHYL
DATE	MAY 1985	<5	<5	<5	<3	<3	<10	<5	A-PYRENE TOTAL (UG/L)
	30...								ETHER TOTAL (UG/L)
		HEXA-CHLORO-CYCLO-PENT-ADIENE	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISO-PHORONE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	METHYL-CHLORO-RIDGE TOTAL (UG/L)	METHYL-NITRO-ENE TOTAL (UG/L)	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)
DATE	MAY 1985	<5	<5	<10	<5	<3	<3	<5	META-CRESOL TOTAL (UG/L)
	30...								PARA-CHLORO-METHANE TOTAL (UG/L)
		PHENAN-THRENE	PYRENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	CHLORO-ETHYL-ENE TOTAL (UG/L)	N-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)	N-NITRO-SODI-PHENYL-LAMINE TOTAL (UG/L)	PARA-CHLORO-ETHYL
DATE	MAY 1985	<5	<5	<3	<3	<3	<5	<5	EN1,2,2-TETRA-CHLORO-ETHANE TOTAL (UG/L)
	30...								ENE1,2,2-TETRA-CHLORO-ETHANE TOTAL (UG/L)

		1,2-DI-CHLOROBENZENE TOTAL (UG/L)		1,2,4-TRANS DI-CHLORO-CHLORO-ETHENE TOTAL (UG/L)		1,2,5,6-DIBENZ-ANTHRA-BENZENE TOTAL (UG/L)		1,3-DI-CHLORO-PROPENE TOTAL (UG/L)		1,4-DI-CHLORO-BENZENE TOTAL (UG/L)		2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)		2-CHLORO-NAPHTHALENE TOTAL (UG/L)	
DATE	MAY 1985	<5	<3	<3	<5	<10	<3	<3	<5	<5	<3	<5	<5	<5	
		DI-N-OCTYL-PHTHALATE TOTAL (UG/L)	2,4-DI-CHLORO-METHYL-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	
DATE	MAY 1985	<5	<10	<5	<5	<5	<5	<20	<20	<5	<5	<5	<5	<30	
		DI-CHLORO-DI-FLUOROMETHANE TOTAL (UG/L)	PHENOL (C6H-5OH) TOTAL (UG/L)	NAPHTH-ALENE TOTAL (UG/L)	PENTA-CHLOROPHENOL TOTAL (UG/L)	PHTHALATE TOTAL (UG/L)	PHTHALATE TOTAL (UG/L)	PHTHALATE TOTAL (UG/L)	PHTHALATE TOTAL (UG/L)	BUTYL-PHTHALATE TOTAL (UG/L)	VINYL-CHLOROPHTHALIDE TOTAL (UG/L)	TRI-CHLOROPHENYL TOTAL (UG/L)	HEXA-CHLOROPHENYL TOTAL (UG/L)	4-CHLOROPHENYL TOTAL (UG/L)	
DATE	MAY 1985	<30	<3	<5	<5	<30	<5	<30	<5	<5	<3	<3	<5	<5	
		4,6-DINITRO-ORTHOCRESOL TOTAL (UG/L)	DINITRO-FLUOROCRESOL TOTAL (UG/L)	DINITRO-FLUOROCRESOL TOTAL (UG/L)	SOLIDSSOLIDS, VOLATILE IN BOTTOM MA-MA-MA-MA-	NITRO-GEN, NO2+NO3 TOT. IN AMMONIA TOTAL BOT MAT (MG/KG AS N)	NITRO-GEN, NO2+NO3 TOT. IN AMMONIA TOTAL BOT MAT (MG/KG AS N)	NITRO-GEN, NO2+NO3 TOT. IN AMMONIA TOTAL BOT MAT (MG/KG AS N)	NITRO-GEN, NO2+NO3 TOT. IN AMMONIA TOTAL BOT MAT (MG/KG AS N)	CADMIUM RECOV. FM BOT-TERIAL SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TERIAL SOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOT-TERIAL SOLVED (UG/L AS CR)	CADMIUM RECOV. FM BOT-TERIAL SOLVED (UG/L AS CR)	CHROMIUM, COBALT, RECOV. FM BOT-TERIAL SOLVED (UG/L AS CR)	
		301150093171600 - CALCASTU RIVER AT BAYOU D'INDE, 2.8 MILES SOUTHEAST OF HOLLYWOOD, LOUISIANA													
DATE	MAY 1985	1530	15/2000	<0.10	2.0	0.29	4.7	1.0	3200	0.08	520	<1	<1	<1	
DATE	MAY 1985	30...	8	<100	<100	160	31	1	<1	10	<10	200	1	2	

TABLE 6.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

COPPER, TOTAL	COPPER, FM BOT- DIS- RECOV- ERABLE	IRON, TOTAL	IRON, FM BOT- RECOV- ERABLE	IRON, TOTAL	LEAD, TOTAL	LEAD, FM BOT- DIS- RECOV- ERABLE	LEAD, FM BOT- TOM MA- TERIAL	LEAD, TOTAL	MANGA- NESE,
DATE MAY 1985 30...	(UG/L AS CU)	TOTAL (UG/G AS CU)	TOTAL (UG/G AS FE)	TOTAL (UG/G AS FE)	TOTAL (UG/G AS FE)	TOTAL (UG/G AS FE)	TOTAL (UG/G AS FE)	TOTAL (UG/G AS FE)	TOTAL (UG/G AS FE)
COPPER, RECOV.	FM BOT- TOM MA- TERIAL	IRON, DIS- SOLVED	IRON, DIS- SOLVED	IRON, DIS- SOLVED	LEAD, SOLVED	LEAD, SOLVED	LEAD, SOLVED	LEAD, SOLVED	LEAD, SOLVED
	(UG/L AS CU)	(UG/G AS CU)	(UG/L AS FE)	(UG/L AS FE)	(UG/G AS FE)	(UG/G AS FE)	(UG/G AS FE)	(UG/G AS FE)	(UG/G AS FE)
MERCURY RECOV.	SELE- NIUM, TOTAL	SILVER, DIS- SOLVED	SILVER, DIS- SOLVED	SILVER, DIS- SOLVED	ZINC, TOTAL	ZINC, TOTAL	ZINC, TOTAL	ZINC, TOTAL	ZINC, TOTAL
DATE MAY 1985 30...	(UG/L AS HG)	(UG/L AS SE)	(UG/L AS AG)	(UG/L AS AG)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
MERCURY RECOV.	DI- CHLORO- BROMO- BROMATE	CARBON- TETRA- CHLO- RIDE	1,2-DI- CHLORO- ETHANE	BROMO- FORM	CHLORO- BROMO- METHANE	CHLORO- FORM	TOLUENE	BENZENE	ACE- NAPHTH- ENE
	(G/KG AS C)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
CARBON, INORG + ORGANIC, TOT IN BOT MAT	BENZO K FLUOR- AN-	BENZO- A- PYRENE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	TOLUENE	BENZENE	ACE- NAPHTH- ENE
DATE MAY 1985 30...	(G/KG AS C)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
CARBON, INORG + ORGANIC, TOT IN BOT MAT	BENZO B FLUOR- AN-	BENZO- A- PYRENE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	TOLUENE	BENZENE	ACE- NAPHTH- ENE
DATE MAY 1985 30...	(G/KG AS C)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
ANTHRA- CENE TOTAL	THENE TOTAL	THENE TOTAL	CHLORO- ETHYL ETHER	CHLORO- ETHYL ETHER	CHLORO- BENZENE	CHLORO- BENZENE	CHLORO- ETHANE	CHLORO- ETHANE	CHRY- SENE
DATE MAY 1985 30...	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
DI- METHYL- PHTHAL- ATE TOTAL	ETHYL- BENZENE TOTAL	FLUOR- ANTHENE TOTAL	FLUOR- ENE TOTAL	FLUOR- ENE TOTAL	INDENO- (1,2,3- CD)	ISO- PHORENE	METHYL- BROMIDE	METHYL- BROMIDE	NITRO- SODI-N- PROPYL-
DATE MAY 1985 30...	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)



TABLE 6.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

	BIS (2-CHLORO-ETHoxy) METHANE TOTAL (UG/L)	BIS (2-CHLORO-ISO-BENZYL-PHTHALATE) TOTAL (UG/L)	N-BUTYL-BENZYL-PHTHALATE TOTAL (UG/L)	CHLOROBENZENE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	CHRYSENE TOTAL (UG/L)	DIETHYL-PHTHALATE TOTAL (UG/L)	DI-METHYL-PHTHALATE TOTAL (UG/L)	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)
DATE	MAY 1985 30...	<5	<5	<5	<3	<3	<10	<5	<3	<5
	HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISO-PHORONE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	CHLORO-RIDE TOTAL (UG/L)	METHYL-AMINE TOTAL (UG/L)	N-METHYL-NITRO-SODIUM-PROPYL-AMINE TOTAL (UG/L)	N-NITRO-SODIUM-METHYL-LAMINE TOTAL (UG/L)	PARA-CHLOROMETA-CRESOL TOTAL (UG/L)	PARA-CHLORO-ENE TOTAL (UG/L)
DATE	MAY 1985 30...	<5	<5	<10	<5	<3	<3	<5	<5	<30
	PHENAN-THRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-ENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TETRA-CHLORO-ETHANE TOTAL (UG/L)	BENZO A-BENZOPHENON TOTAL (UG/L)	1,1,2,2-ENEPHENONE TOTAL (UG/L)
DATE	MAY 1985 30...	<5	<5	<3	<3	<3	<3	<5	<5	<30
	1,2-DI-CHLOROBENZENE TOTAL (UG/L)	1,2-TRANS-DI-CHLORO-ETHENE TOTAL (UG/L)	1,2-TRI-CHLOROBENZENE TOTAL (UG/L)	1,2,4,6-DIBENZ-ANTHRA-CENE TOTAL (UG/L)	1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	1,3-DI-CHLOROBENZENE TOTAL (UG/L)	1,4-DI-CHLOROVINYL-ETHER TOTAL (UG/L)	2-CHLORO-VINYLETHER TOTAL (UG/L)	2-CHLOROPHENOL TOTAL (UG/L)	2-CHLOROPHENYL TOTAL (UG/L)
DATE	MAY 1985 30...	<5	<3	<3	<5	<10	<3	<3	<3	<5
	2-NITRO-PHENOL TOTAL (UG/L)	DI-N-OCTYL-PHTHALATE TOTAL (UG/L)	2,4-DI-CHLOROPHENOL TOTAL (UG/L)	2,4-DI-METHYL-NITRO-PHENOL TOTAL (UG/L)	2,4,6-DI-NITRO-PHENOL TOTAL (UG/L)	2,4,6-TRI-NITRO-PHENOL TOTAL (UG/L)	4-BROMOPHENYL TOTAL (UG/L)	4-CHLOROPHENYL TOTAL (UG/L)	4-NITRO-PHENOL TOTAL (UG/L)	4-NITRO-PHENYL TOTAL (UG/L)
DATE	MAY 1985 30...	<5	<10	<5	<5	<5	<20	<5	<5	<30

TABLE 6.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

		CARBON, ORGANIC SUS- PENDED	CARBON, ORGANIC TOT. IN BOTTOM	CARBON, INORG + GANIC, TOT. IN BOT MAT	ACE- NAPHTH- ENE TOT. IN BOT MAT (MG/KG AS C)	ACE- NAPHTH- ENE TOT. IN BOT MAT (MG/KG AS C)	BENZO K FLUOR- AN- PYRENE TOT. (UG/L)	BENZO B FLUOR- AN- PYRENE TOT. (UG/L)	BIS 2- CHLORO- ETHYL
DATE	MAY 1985	TOTAL (MG/L AS C)	TOTAL (GM/L AS C)	TOTAL (GM/KG AS C)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	INDENO (1,2,3- CD)
30...	7.8	0.9	56	0.1	56	<5	<5	<10	<10
									<5
BIS (2- CHLORO- ETHOXY) METHANE	BIS (2- CHLORO- ISO- PROPYL) ETHER	N-BUTYL BENZYL PHTHAL- ATE	N-BUTYL BENZYL PHTHAL- ATE	DIETHYL PHTHAL- ATE	DI- METHYL PHTHAL- ATE	DIETHYL PHTHAL- ATE	FLUOR- ANE TOT. (UG/L)	FLUOR- ANE TOT. (UG/L)	HEXA- CHLORO- CYCLO- PENT- ADIENE
DATE	MAY 1985	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	INDENO (1,2,3- CD)
30...	<5	<5	<5	<10	<5	<5	<5	<5	<10
									<5
N- NITRO- SODI-N- PROPYL- AMINE	N-NITRO- -SODI- PHENY- LAMINE	N-NITRO- -SODI- METHY- LAMINE	NITRO- BENZENE	PARA- CHLORO- META- CRESOL	PHENAN- THRENE TOT. (UG/L)	PYRENE TOT. (UG/L)	FLUOR- ANE TOT. (UG/L)	FLUOR- ANE TOT. (UG/L)	HEXA- CHLORO- CHLORO- BENZENE
DATE	MAY 1985	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	INDENO (1,2,3- CD)
30...	<5	<5	<5	<5	<30	<5	<10	<5	<5
									<5
1,3-DI- CHLORO- BENZENE	1,4-DI- CHLORO- BENZENE	2- CHLORO- NAPH- THALENE	2- CHLORO- PHENOL	2- NITRO- PHENOL	DI-N- OCTYL PHTHAL- ATE	2,4-DI- CHLORO- PHENOL	2,4-DI- NITRO- TOLUENE	2,4-DI- NITRO- PHENOL	1,2-DI- CHLORO- BENZENE
DATE	MAY 1985	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	INDENO (1,2,3- CD)
30...	<5	<5	<5	<5	<10	<5	<5	<20	<20
									<5
4- BROMO- PHENYL	4- PHENYL	4- DINITRO PHENYL	4,6- DINITRO -ORTHO- PHENOL	PHENOL (C6H- 5OH)	NAPHTH- ALENE TOT. (UG/L)	PENTA- CHLORO- PHENOL	DI- BUTYL- ATE	DI-N- BUTYL- PHENOL	1,2-DI- CHLORO- BUTENE
DATE	MAY 1985	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	INDENO (1,2,3- CD)
30...	<5	<5	<30	<30	<5	<30	<5	<5	<5
									<5

TABLE 6.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

CALCASIEU RIVER AT BURTON LANDING NEAR LAKE CHARLES, LOUISIANA									
SOLIDS,	NITRO-GEN,	NITRO-GEN,	NITRO-GEN, NH <sub>4</sub>	NITRO-GEN, AM-MONIA *	NITRO-GEN, AM-MONIA *	NITRO-GEN, NH <sub>4</sub>	NITRO-GEN, AM-MONIA *	NITRO-GEN, NH <sub>4</sub>	NITRO-GEN, NH <sub>4</sub>
VOLA-TILE IN BOTTOM MA-TERIAL (MG/KG)	NITRO-GEN, NO <sub>2</sub> +NO <sub>3</sub> TOT. IN BOT. MAT. (MG/L AS N)	NITRO-GEN, DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL SOLVED MAT. (MG/KG AS N)	NITRO-GEN, AMMONIA TOTAL SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL SOLVED MAT. (MG/KG AS N)	NITRO-GEN, AMMONIA TOTAL SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL SOLVED MAT. (MG/KG AS N)	NITRO-GEN, AMMONIA TOTAL SOLVED MAT. (MG/L AS N)
DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
MAY 1985	30...	MAY 1985	1345	MAY 1985	41600	MAY 1985	0.02	MAY 1985	0.02
30...		30...		30...		30...		30...	
PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS TOTAL IN BOT. MAT. (MG/KG AS P)	PHOS-PHOROUS TOTAL IN BOT. MAT. (UG/L AS AS)	PHOS-PHOROUS ARSENIC TOTAL DIS-SOLVED (UG/L AS AS)	PHOS-PHOROUS ARSENIC TOTAL IN BOT. MAT. (UG/L AS AS)	PHOS-PHOROUS ARSENIC TOTAL DIS-SOLVED (UG/L AS AS)	PHOS-PHOROUS ARSENIC TOTAL IN BOT. MAT. (UG/L AS AS)	PHOS-PHOROUS ARSENIC TOTAL DIS-SOLVED (UG/L AS AS)	PHOS-PHOROUS ARSENIC TOTAL IN BOT. MAT. (UG/L AS AS)	PHOS-PHOROUS ARSENIC TOTAL DIS-SOLVED (UG/L AS AS)
CHRO-MIUM, TOTAL DIS-SOLVED (UG/L AS CR)	CHRO-MIUM, RECOV. FM BOT-TERIAL (UG/G AS CR)	CHRO-MIUM, RECOV. FM BOT-TERIAL (UG/L AS CR)	CHRO-MIUM, COBALT, RECOV-ERABLE (UG/L AS CO)	CHRO-MIUM, COBALT, RECOV-ERABLE (UG/L AS CO)	CHRO-MIUM, COBALT, RECOV-ERABLE (UG/L AS CO)	CHRO-MIUM, COBALT, RECOV-ERABLE (UG/L AS CU)	CHRO-MIUM, COBALT, RECOV-ERABLE (UG/L AS CU)	CHRO-MIUM, COBALT, RECOV-ERABLE (UG/L AS CU)	CHRO-MIUM, COBALT, RECOV-ERABLE (UG/L AS CU)
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
MAY 1985	30...	MAY 1985	30...	MAY 1985	30...	MAY 1985	30...	MAY 1985	30...
LEAD, FM BOT-TERIAL (UG/L AS PB)	LEAD, FM BOT-TERIAL (UG/G AS PB)	LEAD, FM BOT-TERIAL (UG/G AS MN)	MANGANESE, FM BOT-TERIAL (UG/L AS MN)	MANGANESE, FM BOT-TERIAL (UG/L AS MN)	MANGANESE, FM BOT-TERIAL (UG/G AS MN)	MERCURY, MANGANESE, RECOV. FM BOT-TERIAL (UG/G AS MN)	MERCURY, MANGANESE, RECOV. FM BOT-TERIAL (UG/G AS MN)	MERCURY, MANGANESE, RECOV. FM BOT-TERIAL (UG/G AS MN)	MERCURY, MANGANESE, RECOV. FM BOT-TERIAL (UG/G AS MN)
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
MAY 1985	30...	MAY 1985	30...	MAY 1985	30...	MAY 1985	30...	MAY 1985	30...
ZINC, FM BOT-TERIAL (UG/L AS ZN)	ZINC, FM BOT-TERIAL (UG/G AS ZN)	ZINC, FM BOT-TERIAL (UG/G AS C)	CARBON, CARBON, ORGANIC SUS-PENDED (MG/L AS C)	CARBON, CARBON, ORGANIC SUS-PENDED (MG/L AS C)	CARBON, CARBON, ORGANIC SUS-PENDED (MG/L AS C)	CARBON, CARBON, INORG + ORGANIC TOT. IN BOTTOM MAT. (GM/KG AS C)	CARBON, CARBON, INORG + ORGANIC TOT. IN BOTTOM MAT. (GM/KG AS C)	CARBON, CARBON, INORG + ORGANIC TOT. IN BOTTOM MAT. (GM/KG AS C)	CARBON, CARBON, INORG + ORGANIC TOT. IN BOTTOM MAT. (GM/L AS C)
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
MAY 1985	30...	MAY 1985	30...	MAY 1985	30...	MAY 1985	30...	MAY 1985	30...
20	30	6.5	0.9	11	0.2	11	<3	<3	<3

DATE	METHANE TOTAL (UG/L)	CHLORO- BROMO- FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ACE- NAPHTH- YLENE TOTAL (UG/L)	ACE- NAPHTH- ENE TOTAL (UG/L)	ANTHRA- CENE TOTAL (UG/L)	AN-	BENZO K FLUOR- AN-	BENZO B FLUOR- AN-	BENZO K FLUOR- AN-	BENZO- CHLORO- ETHYL ETHER TOTAL (UG/L)	BIS 2- CHLORO- ETHYL -SODI-						
MAY 1985 30...	<3	<3	<3	<3	<3	<3	<3	<5	<5	<5	<10	<10	<10	<5	<5	<5	<5	<5	
		BIS ('2- CHLORO- ISO- PROPYL) METHANE TOTAL (UG/L)	N-BUTYL BENZYL PHTHAL- ATE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)	CHRY- SENE TOTAL (UG/L)	DIETHYL- PHTHAL- ATE TOTAL (UG/L)	DI- METHYL PHTHAL- ATE TOTAL (UG/L)	DIETHYL- BENZENE TOTAL (UG/L)										
DATE	METHANE TOTAL (UG/L)																		
MAY 1985 30...	<5	<5	<5	<5	<3	<3	<3	<10	<5	<3	<5	<3	<5	<5	<5	<5	<5	<5	
		HEXA- CHLORO- CYCLO- PENT- ADIENE TOTAL (UG/L)	INDENO (1,2,3- CD)	ISO- PHORONE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLORO- RIDE TOTAL (UG/L)	METHYL- NITRO- ENE TOTAL (UG/L)	METHYL- NITRO- ENE TOTAL (UG/L)	METHYL- NITRO- SODI- PROPYL- AMINE TOTAL (UG/L)	METHYL- NITRO- SODI- PHENY- LAMINE TOTAL (UG/L)									
DATE	METHANE TOTAL (UG/L)																		
MAY 1985 30...	<5	<5	<10	<5	<3	<3	<3	<5	<3	<3	<5	<5	<5	<5	<5	<5	<30	<30	
		TETRA- CHLORO- ETHYL- PYRENE TOTAL (UG/L)	TRI- CHLORO- ENE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	
DATE	PYRENE TOTAL (UG/L)																		
MAY 1985 30...	<5	<5	<3	<3	<3	<3	<3	<10	<3	<3	<3	<3	<3	<3	<3	<3	<10	<5	
		1,2-DI- CHLORO- BENZENE TOTAL (UG/L)	1,2- TRANSIDI CHLORO- PROPANE TOTAL (UG/L)	1,2,4- TRI- CHLORO- ETHENE TOTAL (UG/L)	1,2,4- TRI- CHLORO- BENZENE TOTAL (UG/L)	1,2,4- TRI- CHLORO- BENZENE TOTAL (UG/L)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L)										
DATE																			
MAY 1985 30...	<5	<3	<3	<5	<5	<5	<10	<3	<5	<5	<5	<5	<5	<3	<3	<10	<5	<5	

TABLE 6.-CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

DATE	MAY 1985	2-			4-			4-		
		DI-N-OCTYL PHTHAL-ATE TOTAL (UG/L)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L)	2,4-DI-METHYL-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,6-DI-CHLORO-NITRO-PHENOL TOTAL (UG/L)	2,6-DI-CHLORO-NITRO-PHENOL TOTAL (UG/L)	BROMO-PHENYL ETHER TOTAL (UG/L)	CHLOROPHENYL PHENYL TOTAL (UG/L)	NITRO-PHENOL ETHER TOTAL (UG/L)
MAY 30...	<5	<10	<5	<5	<5	<20	<20	<5	<5	<30
		DI-CHLORO-DI-FLUORO-CRESOL	PHENOL-(C6H-5OH) TOTAL (UG/L)	NAPHTH-ALENE TOTAL (UG/L)	PENTA-CHLORO-PHENOL TOTAL (UG/L)	DI-N-BUTYL-PHTHAL-ATE TOTAL (UG/L)	VINYLCHLORO-ETHYL-RIDE TOTAL (UG/L)	TRI-CHLORO-ENE TOTAL (UG/L)	HEXA-CHLOROBUT-ADIENE TOTAL (UG/L)	
MAY 30...	<30	<3	<5	<30	<5	<5	<5	<3	<5	<5

3000127093184900 - CALCASIEU LAKE, 2.3 MILES NORTHEAST OF HACKBERRY, LOUISIANA

| IRON,<br>CHRO-<br>MIUM,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CR) |
|--|--|--|--|--|
| DATE<br>MAY 1985<br>30...  | DATE<br>MAY 1985<br>30...  | DATE<br>MAY 1985<br>30...  | DATE<br>MAY 1985<br>30...  | DATE<br>JUN 04...  |
| COPPER,<br>COBALT,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CO)      | COPPER,<br>COBALT,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CO)      | COPPER,<br>COBALT,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CO)      | COPPER,<br>COBALT,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CO)      | MERCURY  |
| LEAD,<br>RECOV.<br>FM BOT-<br>TOM MA-<br>TERIAL<br>(UG/G<br>AS PB)       | MANGA-<br>NESE,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN)         | MANGA-<br>NESE,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN)         | MANGA-<br>NESE,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS HG)         | MERCURY<br>RECOV.<br>FM BOT-<br>TOM MA-<br>TERIAL<br>(UG/G<br>AS HG)     |
| ZINC,<br>ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN)                      | CARBON,<br>ORGANIC,<br>DIS-<br>SOLVED<br>(MG/L<br>AS C)                  | CARBON,<br>ORGANIC,<br>SUS-<br>PENDED<br>TOTAL<br>(MG/L<br>AS C)         | CARBON,<br>ORGANIC,<br>TOT. IN<br>BOTTOM<br>MAT.<br>(GM/KG<br>AS C)      | CARBON,<br>INORG +<br>ORGANIC<br>TOT. IN<br>BOT. MAT<br>(KG/KG<br>AS C)  |
| BENZO B<br>FLUOR-<br>AN-   | BENZO B<br>FLUOR-<br>AN-   | BENZO K<br>THENE<br>TOTAL<br>(UG/L)                                      | BENZO K<br>THENE<br>TOTAL<br>(UG/L)                                      | BENZO-<br>A-   |
| ANTHRA-<br>CENE<br>BOT.MAT<br>(UG/KG)                                    | ANTHRA-<br>CENE<br>BOT.MAT<br>(UG/L)                                     | ANTHRA-<br>CENE<br>BOT.MAT<br>(UG/L)                                     | ANTHRA-<br>CENE<br>BOT.MAT<br>(UG/L)                                     | ANTHRA-<br>CENE<br>BOT.MAT<br>(UG/L)                                     |
| BIS (2-<br>CHLORO-<br>ISO-<br>PROPYL)<br>BOT.MAT<br>(UG/L)               | N-BUTYL<br>BENZYL<br>PHTHAL-<br>ATE<br>TOTAL<br>(UG/L)                   | N-BUTYL<br>BENZYL<br>PHTHAL-<br>ATE<br>TOTAL<br>(UG/L)                   | N-BUTYL<br>BENZYL<br>PHTHAL-<br>ATE<br>TOTAL<br>(UG/L)                   | BIS (2-<br>CHLORO-<br>ISO-<br>PROPYL)<br>BOT.MAT<br>(UG/L)               |
| DATE<br>MAY 1985<br>30...  | DATE<br>MAY 1985<br>30...  | DATE<br>MAY 1985<br>30...  | DATE<br>MAY 1985<br>30...  | DATE<br>JUN 04...  |
| IRON,<br>RECOV.<br>FM BOT-<br>TOM MA-<br>TERIAL<br>(UG/L<br>AS FE)       | IRON,<br>RECOV.<br>FM BOT-<br>TOM MA-<br>TERIAL<br>(UG/L<br>AS AG)       |
| ZINC,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS ZN)                   |
| LEAD,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE)                   | LEAD,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE)                   | LEAD,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE)                   | LEAD,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE)                   | LEAD,<br>TOTAL,<br>RECOV-<br>ERABLE<br>(UG/L<br>AS AG)                   |
| FLUOR-<br>ENE<br>TOTAL<br>(UG/L)   | FLUOR-<br>ENE<br>TOTAL<br>(UG/L)   | FLUOR-<br>ENE<br>TOTAL<br>(UG/L)   | FLUOR-<br>ENE<br>TOTAL<br>(UG/L)   | FLUOR-<br>ENE<br>TOTAL<br>(UG/L)   |

TABLE 6.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

		HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL	HEXA-CHLORO-CHLORO-PENT-ETHANE TOTAL	HEXA-CHLORO-ETHANE TOTAL	INDENO-(1,2,3-CD) PYRENE TOTAL	ISO-PYRENE BOT.MAT (UG/KG)	ISO-PHORONE BOT.MAT (UG/KG)	ISO-PHORONE BOT.MAT (UG/L)	N-NITRO-SODI-N-PROPYL-LAMINE TOTAL	N-NITRO-SODI-N-PROPYL-AMINE TOTAL	N-NITRO-SODI-N-PROPYL-PHENYL-LAMINE TOTAL
DATE	FLUOR-ENE	BOT.MAT (UG/L)	BOT.MAT (UG/KG)	(UG/L)	(UG/L)	(UG/KG)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)
MAY 1985 30...	---	<5	---	<5	---	<10	---	<5	---	<5	---
JUN 04...	<10	---	<20	---	<18	---	<13	---	<10	---	<33
		N-NITRO-SODI-PHENYL-METHYL-LAMINE TOTAL	N-NITRO-SODI-PHENYL-METHYL-LAMINE TOTAL	NAPHTH-ALENE BENZENE TOTAL	NITRO-BENZENE TOTAL	CRESOL TOTAL	CRESOL TOTAL	CRESOL TOTAL	PHENAN-META	PHENAN-META	PHENAN-META
DATE	BOT.MAT (UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)
MAY 1985 30...	---	<5	---	---	<5	---	<30	---	<5	---	<5
JUN 04...	<10	---	<18	<10	---	<10	---	<20	---	<10	---
		BENZOGH-BENZO I PERYL ENE1,12	BENZO A ANTHRAC-ENE1,12	BENZO A ANTHRAC-ENE1,2-	1,2-DI-CHLOROBENZENE TOTAL	1,2-DI-CHLOROBENZENE TOTAL	1,2-DI-CHLOROBENZENE TOTAL	1,2-DI-CHLOROBENZENE TOTAL	1,2,4-TRI-CHLOROBENZENE TOTAL	1,2,4-TRI-CHLOROBENZENE TOTAL	1,2,4-TRI-CHLOROBENZENE TOTAL
DATE	PYRENE	BOT.MAT (UG/KG)	ERYLINE TOTAL	ERYLINE TOTAL	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
MAY 1985 30...	---	<10	---	---	<5	---	<5	---	<5	---	<10
JUN 04...	<10	---	15	---	<10	---	<10	---	<10	---	<16
		1,3-DI-CHLOROBENZENE TOTAL	1,4-DI-CHLOROBENZENE TOTAL	2-CHLOROBENZENE TOTAL	2-CHLOROBENZENE TOTAL	2-CHLOROBENZENE TOTAL	2-CHLOROBENZENE TOTAL	2-CHLOROBENZENE TOTAL	2-NITROPHENOL TOTAL	2-NITROPHENOL TOTAL	2-NITROPHENOL TOTAL
DATE		(UG/L)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
MAY 1985 30...	<5	---	<5	---	<5	---	<5	---	<5	---	<10
JUN 04...	---	<10	---	<10	---	<10	---	<20	---	<21	---

DI-N-OCTYL-PHTHALATE	2,4-DI-CHLORO-CHLOROPHENOL	2,4-DI-METHYL-PHENOL	2,4-DP, IN BOTOM	2,4-DI-NITRO-TOLUENE	2,4-DI-NITRO-PHENOL	2,4,- DI-NITRO-PHENOL	2,4,- DI-NITRO-PHENOL
DATE	BOT.MAT (UG/L)	BOT.MAT (UG/KG)	TOTAL MAT. (UG/L)	TOTAL MAT. (UG/KG)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/L)
MAY 1985 30...	---	<5	---	<5	---	<5	---
JUN 04...	<10	---	<20	---	<20	---	<20
2,6-DI-NITRO-TOLUENE	2,6-DI-NITRO-PHENYL	4-BROMO-PHENYL	4-BROMO-PHENYL	4-NITRO-PHENYL	4-NITRO-PHENYL	DINITRO CRESOL	DINITRO CRESOL
DATE	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)
MAY 1985 30...	<5	---	<5	---	<5	---	<5
JUN 04...	---	<18	---	<15	<10	---	<25
NAPHTH-ALENE	PENTA-CHLOROPHENOL	PENTA-CHLOROPHENOL	BIS(2-ETHYL-HEXYL) PHTHALATE	DI-N-BUTYL-PHTHALATE	DI-N-BUTYL-PHTHALATE	HEXA-CHLOROBENZENE	HEXA-CHLOROBENZENE
DATE	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)
MAY 1985 30...	<5	<30	---	<5	---	<5	---
JUN 04...	---	<30	---	<10	---	<25	---
294605093204200 - CALCASIEU RIVER AT BUOY 47, 2.4 MILES SOUTHWEST OF CAMERON, LOUISIANA							
SOLIDS, VOLATILE IN BOTTOM MASS	NITRO-GEN, NO2+NO3 TOTAL	NITRO-GEN, NO2+NO3 DIS-SOLVED	NITRO-GEN, NO2+NO3 TOT. IN AMMONIA	NITRO-AMMONIA TOTAL	NITRO-AMMONIA DIS-SOLVED	NITRO-GEN, NH4 MONIA + MONIA + ORGANIC	NITRO-GEN, NH4 MONIA + ORGANIC
DATE	TIME	TERIAL (MG/L AS N)	TERIAL (MG/L AS N)	BOT. MAT (MG/KG AS N)	BOT. MAT (MG/L AS N)	DIS. (MG/KG AS N)	DIS. (MG/L AS N)
MAY 1985 30...	1100	30900 <0.10	<0.10	<2.0	0.43	0.34	7.4 0.8

TABLE 6.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

	BIS (2-CHLORO-ISO-PROPYL)	N-BUTYL BENZYL	CHLORO-BENZENE	CHRYSENE	DIETHYL-PHTHALATE	DI-METHYL-PHTHALATE	FLUOR-ENE
DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
MAY 1985 30...	<5	<5	<5	<3	<10	<5	<5
						<3	<5
							<5
	HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	HEXA-CHLORO-ETHER ETHANE TOTAL (UG/L)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	CHLORO-BROMIDE TOTAL (UG/L)	METHYL-AMINE TOTAL (UG/L)	N-NITRO-SODIUM PROPYL-AMINE TOTAL (UG/L)	PARA-CHLORO-META-CRESOL TOTAL (UG/L)
DATE							
MAY 1985 30...	<5	<5	<10	<5	<3	<5	<5
						<5	<30
	PHENAN-THRENE TOTAL (UG/L)	PYRENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TETRA-CHLORO-Ethane TOTAL (UG/L)	BENZO A ANTHRACENE TOTAL (UG/L)
DATE							
MAY 1985 30...	<5	<5	<3	<3	<3	<3	<10
	1,2-DI-CHLORO-BENZENE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2,4-TRANSIDI-CHLORO-ETHENE TOTAL (UG/L)	1,2,4-DIBENZ-ANTHRA-CENE TOTAL (UG/L)	1,3-DI-CHLORO-PROFENE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	CHLORO-ETHENE TOTAL (UG/L)
DATE							
MAY 1985 30...	<5	<3	<3	<10	<3	<5	<3
	2-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-CHLORO-ATE TOTAL (UG/L)	2,4-DI-METHYL-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,6-DI-CHLORO-PHENOL TOTAL (UG/L)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L)	4-CHLOROPHENYL ETHER TOTAL (UG/L)
DATE							
MAY 1985 30...	<5	<10	<5	<5	<20	<5	<5
							<30

TABLE 6.-CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1985--CONTINUED

DATE MAY 30...	DI- CHLORO- DI- FLUORO- CRESOL TOTAL (UG/L)	PHENOL (C6H- 5OH) TOTAL (UG/L)	NAPHTH- ALENE TOTAL (UG/L)	PENTA- CHLORO- PHENOL TOTAL (UG/L)	BIS(2- ETHYL HEXYL) PHTHAL- ATE TOTAL (UG/L)	DI-N- BUTYL PHthal- ATE TOTAL (UG/L)	VINYL CHLO- RIDE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L)
	4,6- DINITRO- METHANE TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- CRESOL TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- CRESOL TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- CRESOL TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- CRESOL TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- CRESOL TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- CRESOL TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- CRESOL TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- CRESOL TOTAL (UG/L)
IN SITU WATER-QUALITY MEASUREMENTS, MAY 29-30, 1985									
MAY 29, 1985									
SITE NAME, TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SITE NAME, TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)
CALCASIEU RIVER ABOVE BAYOU SERPENT 1630	1.6 18.2	27.9 26.0	6.8 6.2	9.1 6.4	63 62	CALCASIEU RIVER AT BAYOU D'INDE 1530	1.6 8.9	29.0 28.4	8.6 8.2
BAYOU SERPENT 300 FEET ABOVE MOUTH 1735	1.6 16.2	27.4 24.5	6.6 6.0	8.6 0.6	59 117	CALCASIEU RIVER AT PETROLEUM REFINERY 1435	1.6 28.0	27.9 26.3	9.9 7.5
WEST FORK CALCASIEU RIVER 1855	1.6 16.5 26.4 36.3	27.2 23.3 24.9 25.3	6.6 6.2 --- 6.5	6.2 0.3 0.3 0.4	363 502 4,160 8,250	CALCASIEU RIVER AT BURTON LANDING 1340	1.6 9.9	27.5 27.4	14,400 15,500
CALCASIEU RIVER AT SHIP CHANNEL NEAR BUOY 130 1700	1.6 13.2 26.4 42.9	27.9 27.5 26.5 24.6	7.6 7.2 7.2 7.2	8.1 5.5 7.680 0.4	5,730 1.1 20,000 25,700	CALCASIEU RIVER AT DEVIL'S ELBOW 1315	1.6 23.1	27.5 27.0	17,100 23,600
CALCASIEU RIVER AT BUOY 130 1730	1.6 13.2	27.9 27.8	7.6 7.4	8.4 7.2	5,360 6,800	CALCASIEU RIVER AT BUOY 47 NEAR CAMERON 1100	1.6 9.9 19.8 27.0	27.1 27.1 19.8 27.0	17,400 17,400 34,500 34,600
CALCASIEU RIVER AT BUOY 114 1615	1.6 20.1	29.3 28.7	8.5 8.4	9.2 8.1	13,100 13,500				

TABLE 7.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, AUGUST 1985

TABLE 7.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, AUGUST 1985--CONTINUED

DATE	CHLORO- FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- ETANE TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLO- RIDE TOTAL (UG/L)	METHYL- CHLORO- ENE TOTAL (UG/L)	METHYL- FLUORO- ENE TOTAL (UG/L)	TRI- CHLORO- ETHANE TOTAL (UG/L)
DATE	1,1-DI- CHLORO- TRI- ETHYL- ENE TOTAL (UG/L)	1,1,1- CHLORO- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- CHLORO- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- TETRA- CHLORO- PROPANE TOTAL (UG/L)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	1,2-CHLORO- CHLORO- ETHENE TOTAL (UG/L)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	1,3-DI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	1,3-DI- CHLORO- VINYL- ETHER TOTAL (UG/L)	1,3-DI- CHLORO- CHLORO- RIDGE TOTAL (UG/L)	1,1-DI- CHLORO- CHLORO- ENE TOTAL (UG/L)
AUG 1985 28...	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
AUG 1985 28...	1,1-DI- CHLORO- TRI- ETHYL- ENE TOTAL (UG/L)	1,1,1- CHLORO- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- CHLORO- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- TETRA- CHLORO- PROPANE TOTAL (UG/L)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	1,2-CHLORO- CHLORO- ETHENE TOTAL (UG/L)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	1,3-DI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	1,3-DI- CHLORO- VINYL- ETHER TOTAL (UG/L)	1,3-DI- CHLORO- CHLORO- RIDGE TOTAL (UG/L)	1,1-DI- CHLORO- CHLORO- ENE TOTAL (UG/L)
AUG 1985 28...	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
301150093171600 - CALCASIEU RIVER AT BAYOU D' INDE, 2.8 MILES SOUTHEAST OF HOLLYWOOD, LOUISIANA											
SOLIDS , VOLATILE IN BOTTOM	NITRO- GEN, NO2+NO3 DIS- TOT. IN TOTAL	NITRO- GEN, NO2+NO3 DIS- TOT. IN TOTAL	NITRO- GEN, NO2+NO3 AMMONIA + MONIA + MONIA + ORGANIC IN BOT.	NITRO- GEN, NH4 AMMONIA + MONIA + ORGANIC IN BOT.	NITRO- GEN, NH4 AMMONIA + MONIA + ORGANIC IN BOT.	NITRO- GEN, NH4 AMMONIA + MONIA + ORGANIC IN BOT.	NITRO- GEN, NH4 AMMONIA + MONIA + ORGANIC IN BOT.	NITRO- GEN, NH4 AMMONIA + MONIA + ORGANIC IN BOT.	NITRO- GEN, NH4 AMMONIA + MONIA + ORGANIC IN BOT.	NITRO- GEN, NH4 AMMONIA + MONIA + ORGANIC IN BOT.	NITRO- GEN, NH4 AMMONIA + MONIA + ORGANIC IN BOT.
DATE TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME	TIME
AUG 1985 28...	1630	131000	<0.10	<0.10	14	0.09	100	0.9	0.5	950	0.14
PHOS- PHOROUS	PHOS- PHOROUS	ARSENIC TOTAL	ARSENIC DIS- SOLVED	BARIUM, TOTAL	BARIUM, TOTAL	BARIUM, FM BOT-	CADMIUM, FM BOT-	CADMIUM, FM BOT-	CADMIUM, FM BOT-	CADMIUM, FM BOT-	CADMIUM, FM BOT-
DATE (MG/KG AS P)	(MG/KG AS P)	DATE (MG/KG AS P)	DATE (MG/KG AS P)	DATE (MG/KG AS P)	DATE (MG/KG AS P)	DATE (UG/L AS AS)					
AUG 1985 28...	0.06	1500	1	<1	6	100	<100	300	1	1	<1
CHRO- MUM, DIS- SOLVED	CHRO- MUM, RECOV.	COBALT, TOTAL	COBALT, DIS- SOLVED	COPPER, TOTAL	COPPER, DIS- SOLVED	COPPER, FM BOT-	IRON, TOTAL	IRON, TOTAL	IRON, FM BOT-	IRON, FM BOT-	IRON, FM BOT-
DATE (UG/L AS CR)	(UG/G AS CR)	(UG/L AS CO)	(UG/L AS CO)	(UG/L AS CO)	(UG/L AS CO)	(UG/L AS CO)	(UG/G AS CU)				
AUG 1985 28...	<10	450	<1	<1	7	2	270	2	30	2950	2



TABLE 7--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, AUGUST 1985--CONTINUED

ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	CARBON- TETRA- CHLORO- RIDE TOTAL (UG/L)	1,2-DI- CHLORO- BROMO- ETHANE TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	CHLORO- BROMO- METHANE TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)
DATE AUG 1985 28...	120	7.7	<3	21	530	45	34	<3	<3	<3
CHLORO- ETHANE TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	CHLORO- BROMIDE TOTAL (UG/L)	CHLORO- ETHYL- ENE TOTAL (UG/L)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	
DATE AUG 1985 28...	<3	<3	<3	25	36	<3	<3	<3	<3	3.4
1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	TRANS DI- CHLORO- ETHENE TOTAL (UG/L)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	CHLORO- ETHYL- VINY- ETHER TOTAL (UG/L)	2- CHLORO- DI- ETHYL- VINY- ETHER TOTAL (UG/L)	2,4,- DI- NITRO- PHENOL TOTAL (UG/L)	1,1-DI- CHLORO- FLUORO- METHANE TOTAL (UG/L)	1,1-DI- CHLORO- FLUORIDE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	
DATE AUG 1985 28...	9.1	<3	<3	<3	<3	<3	<3	<3	<3	3.0
300957093190800 - CALCASIEU RIVER AT PETROLEUM REFINERY, 3.9 MILES SOUTHEAST OF HOLLYWOOD, LOUISIANA										
SOLIDS, VOLA- TILE IN BOTTOM MA- TERIAL (MG/KG)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> TOTAL (MG/L AS N)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> DIS- TOT. IN BOT MAT SOLVED (MG/L AS N)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> TOT. IN BOT MAT SOLVED (MG/KG AS N)	NITRO- AMMONIA TOTAL (MG/L AS N)	NITRO- AMMONIA TOTAL SOLVED (MG/L AS N)	NITRO- GEN NH <sub>4</sub> TOTAL IN BOT. MAT. SOLVED (MG/KG AS N)	NITRO- GEN AM- MONIA + ORGANIC TOTAL DIS. MAT. (MG/KG AS N)	NITRO- GEN AM- MONIA + ORGANIC TOTAL DIS. MAT. (MG/L AS N)	NITRO- GEN NH <sub>4</sub> TOTAL IN BOT. MAT. SOLVED (UG/L AS BA)	NITRO- GEN AM- MONIA + ORGANIC TOTAL DIS. MAT. (MG/KG AS N)
DATE AUG 1985 29...	0930	140000	0.10	<0.10	12	0.20	0.11	570	0.9	0.5
PHOS- PHOROUS DIS- SOLVED (MG/L AS P)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/KG AS P)	PHOS- PHOROUS TOTAL IN BOT. MAT. SOLVED (UG/L AS AS)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL SOLVED (UG/G AS AS)	ARSENIC TOTAL SOLVED (UG/L AS BA)	BARIUM, TOTAL, RECOV- ERABLE (UG/L AS BA)	BARIUM, TOTAL, RECOV- ERABLE (UG/L AS BA)	BARIUM, TOTAL, RECOV- ERABLE (UG/G AS CD)	CADMIUM, TOTAL, RECOV- ERABLE (UG/L AS CD)
DATE AUG 1985 29...	0.10	0.08	410	1	<1	8	100	100	250	<1
										<1

CHRO-MIUM, TOTAL	CHRO-MIUM, FM BOT-	COBALT, TOTAL	COBALT, DIS-	COPPER, TOTAL	COPPER, DIS-	COPPER, FM BOT-	IRON, TOTAL	IRON, FM BOT-	IRON, TOTAL	IRON, FM BOT-	IRON, TOTAL	
RECOV-	RECOV-	RECOV-	RECOV-	RECOV-	RECOV-	RECOV-	RECOV-	RECOV-	RECOV-	RECOV-	RECOV-	
ERABLE	SOLVED	TOM MA-	SOLVED	SOLVED	SOLVED	SOLVED	TOM MA-	TOM MA-	SOLVED	SOLVED	SOLVED	
(UG/L AS CR)	(UG/L AS CR)	TERIAL (UG/G)	(UG/L AS CO)	(UG/L AS CO)	(UG/L AS CO)	(UG/L AS CU)	TERIAL (UG/L AS MN)	TERIAL (UG/G AS MN)	(UG/L AS HG)	(UG/L AS SE)	(UG/L AS AG)	
AUG 1985	29...	20	20	490	<1	<1	7	4	90	150	50	9600
												2
LEAD,	MANGANESE,	MANGANESE,	MANGANESE,	MERCURY	MERCURY	MERCURY	SELENIUM,	SILVER,	ZINC,	ZINC,	ZINC,	
RECOV.	TOTAL	RECOV.	TOTAL	RECOV.	TOTAL	RECOV.	TOTAL	RECOV.	TOTAL	RECOV.	TOTAL	
LEAD,	TOM MA-	RECOV-	DIS-	RECOV-	RECOV-	RECOV-	DIS-	RECOV-	DIS-	RECOV-	DIS-	
DIS-	SOLVED	TERIAL	SOLVED	TOM MA-	SOLVED	TOM MA-	SOLVED	TERIAL	SOLVED	TERIAL	SOLVED	
SOLVED	(UG/L AS PB)	(UG/G AS PB)	(UG/L AS MN)	(UG/L AS MN)	(UG/L AS MN)	(UG/G AS MN)	(UG/G AS MN)	(UG/L AS HG)	(UG/L AS SE)	(UG/L AS AG)	(UG/L AS AG)	
AUG 1985	29...	1	50	100	20	200	<0.1	0.60	<1	<1	<1	<1
												20
ZINC, RECOV.	CARBON, ORGANIC	CARBON, ORGANIC	CARBON, INORG + ORGANIC	CARBON, INORG + ORGANIC	CARBON, INORG + ORGANIC	CARBON, INORG + ORGANIC	DICHLORO-	CARBON-	TETRA-	1,2-DI-	CHLORO-	CHLORO-
ZINC, FM BOT-	TOM MA-	SUS-	TOT. IN BOTTOM	TOT. IN BOT. MAT	TOT. IN BOT. MAT	TOT. IN BOT. MAT	CHLO-	CHLO-	CHLO-	CHLO-	DI-	DI-
DIS-	SOLVED	PENDED	TOTAL	MAT.	BOT. MAT	BOT. MAT	BROMO-	BROMO-	BROMO-	BROMO-	BROMO-	BROMO-
SOLVED	(UG/L AS ZN)	(UG/G AS C)	(MG/L AS C)	(GM/KG AS C)	(GM/KG AS C)	(GM/KG AS C)	METHANE	METHANE	METHANE	METHANE	METHANE	METHANE
AUG 1985	29...	30	120	8.0	1.6	4.8	0.6	4.9	<3	<3	<3	<3
CHLORO- FORM	TOLUENE	BENZENE	CHLORO-	ETHYL-	METHYL-	METHYL-	METHYL-	METHYL-	METHYL-	METHYL-	METHYL-	METHYL-
DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	ETHANE	BENZENE	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	TOTAL
AUG 1985	29...	6.2	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
1,1-DI- CHLORO- ETHYL-	1,1,1- TRI- CHLORO- ENE	1,1,2- CHLORO- ETHANE	1,2-DI- CHLORO- ETHANE	1,2-DI- CHLORO- PROPANE	1,3-DI- CHLORO- ETHENE	1,3-DI- CHLORO- PROPENE	2-CHLORO-	2-CHLORO-	2-CHLORO-	2-CHLORO-	2-CHLORO-	2-CHLORO-
DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	ETHYL-	ETHYL-	VINYLN-	DI- FLUORO-	DI- FLUORO-	DI- FLUORO-
AUG 1985	29...	<3	<3	<3	<3	<3	ETHER	ETHER	ETHER	ETHER	ETHER	ETHER
135												

TABLE 7.—CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA.  
AUGUST 1985—CONTINUED

3000127093184900 - CALCASIEU LAKE, 2.3 MILES NORTHEAST OF HACKBERRY, LOUISIANA



TABLE 7.--CONCENTRATIONS OF VOLATILE SOLIDS, NUTRIENTS, TRACE ELEMENTS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, AUGUST 1985--CONTINUED

DATE	LEAD RECOV. FM BOT- DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV. FM BOT- DIS- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV. FM BOT- DIS- SOLVED (UG/L AS MN)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/L AS SE)	SILVER, TOTAL RECOV- DIS- ERABLE (UG/L AS AG)	ZINC, TOTAL RECOV- DIS- ERABLE (UG/L AS ZN)	
							ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS C)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/L AS C)	
AUG 1985	<1	10	80	20	60	<0.1	0.08	<1	<1
29...	29...	20	10	4.0	0.4	9.0	0.2	9.2	<3
									<3
									30
DATE	CHLORO- FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	CHLORO- ETHYL- RIDE TOTAL (UG/L)	CHLORO- ETHYL- ENE TOTAL (UG/L)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L)
AUG 1985	3.0	<3	<3	<3	<3	<3	<3	<3	1,1-DI- CHLORO- ETHYL- ENE
29...	<3	<3	<3	<3	<3	<3	<3	<3	1,1-DI- CHLORO- ETHYL- ENE
DATE	1,1,1- TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	1,1,2- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- CHLORO- ETHANE TOTAL (UG/L)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	1,3-DI- CHLORO- ETHENE TOTAL (UG/L)	2-	DI- CHLORO- ETHYL- VINYLO- ETHER TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	
AUG 1985	1.1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L)	1.1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	1.1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	1.2- CHLORO- PROPANE TOTAL (UG/L)	1.3-DI- CHLORO- ETHENE TOTAL (UG/L)	2-	DI- CHLORO- ETHYL- VINYLO- ETHER TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	
29...	<3	<3	<3	<3	<3	<3	<3	<3	

IN SITU WATER-QUALITY MEASUREMENTS, AUGUST 28-30, 1985

SITE NAME, TIME	DEPTH (FEET)	TEMP (DEG C)	DO (MG/L)	SPEC COND (US/CM)	ORP (MV)
AUGUST 28, 1985					
CALCASIEU RIVER AT BUOY 130 1130	1.0 5.9 13.2 35.3	29.0 28.5 29.0 30.0	5.9 5.3 0.9 0.4	6,500 7,400 31,500 40,000	+300 +190 --- -100
CALCASIEU RIVER AT BAYOU D'INDE 1630	1.6 9.9 20.1 45.2	29.5 30.0 30.0 30.0	7.4 1.0 0.6 2.1	12,000 31,000 40,000 42,500	+300 +240 +250 +240

SITE NAME, TIME	DEPTH (FEET)	TEMP (DEG C)	DO (MG/L)	SPEC COND (US/CM)	ORP (MV)
AUGUST 29, 1985					
CALCASIEU RIVER AT PETROLEUM REFINERY 0930	1.6 5.0 9.9 20.1 43.2	30.0 30.0 30.0 30.0 30.0	7.4 5.7 2.6 1.5 2.8	19,000 22,500 28,500 37,000 44,000	+360 +400 +380 +280 +320
CALCASIEU RIVER AT BURTON LANDING 1130	1.6 9.9 20.1 44.2 45.2	30.5 29.0 28.0 30.0 30.0	8.8 3.9 4.0 2.0 1.9	21,000 35,000 42,000 43,000 44,500	+400 +320 +260 +300 +160
CALCASIEU LAKE 1100	1.6 4.0	31.5 30.0	--- ---	31,000 31,400	+700 +700

FRACTIONATION OF DISSOLVED ORGANIC CARBON INTO HYDROPHILIC AND HYDROPHOBIC  
COMPONENTS IN WATER FROM THE LOWER CALCASIEU RIVER, LOUISIANA.

[ORGANIC CARBON, IN MILLIGRAMS PER LITER]

SITE NAME	DISSOLVED ORGANIC CARBON	HYDROPHOBIC FRACTION	HYDROPHILIC FRACTION
AUGUST 28-30, 1985			
CALCASIEU RIVER AT BUOY 130	7.5	3.6	3.9
CALCASIEU RIVER AT BAYOU D'INDE	5.2	2.1	3.1
CALCASIEU RIVER AT PETROLEUM REFINERY	6.0	2.8	3.2
CALCASIEU RIVER AT BURTON LANDING	4.9	1.8	3.1
CALCASIEU LAKE	4.7	1.5	3.2

TABLE 8.--LEAD-210 AND CESIUM-137 RADIOACTIVITY PROFILES  
FOR CORE SAMPLES COLLECTED FROM THE LOWER CALCASIEU  
RIVER, LOUISIANA, MARCH 12, 1986

[CONCENTRATION IN PICOCURIES PER GRAM. DEPTH IN INCHES,  
SAMPLE SIZE IN GRAMS. ERROR ESTIMATES ARE AT TWO  
STANDARD DEVIATIONS]

CALCASIEU RIVER AT COON ISLAND LOOP

DEPTH	UNSUPPORTED LEAD-210	CESIUM-137	SAMPLE SIZE
0.00- 1.18	1.620 + 0.434	0.311 + 0.072	13.00
3.94- 5.12	1.094 + 0.242	0.271 + 0.030	29.85
7.87- 9.06	1.152 + 0.304	0.404 + 0.060	19.74
14.17-15.51	1.348 + 0.310	0.390 + 0.046	21.30

BAYOU D'INDE AT MOUTH

0.00- 1.18	0.666 + 0.148	0.161 + 0.028	43.13
3.94- 5.12	0.145 + 0.174	0.025 + 0.026	55.55
7.87- 9.06	0.644 + 0.316	0.134 + 0.046	13.25
11.81-12.99	0.876 + 0.360	0.062 + 0.064	10.60
15.75-16.93	0.934 + 0.318	0.035 + 0.045	15.00
19.69-20.87	0.908 + 0.338	0.066 + 0.050	13.05

PRIEN LAKE

0.00- 1.18	1.501 + 0.214	0.283 + 0.040	23.65
3.94- 5.12	1.065 + 0.172	0.171 + 0.024	41.78
7.87- 9.06	1.767 + 0.196	1.329 + 0.054	30.60
11.81-12.99	1.047 + 0.182	0.242 + 0.024	43.50

CALCASIEU RIVER AT PETROLEUM REFINERY

0.00- 1.18	1.272 + 0.226	0.050 + 0.030	22.67
5.91- 7.09	0.323 + 0.149	0.003 + 0.015	50.01
13.78-14.96	0.502 + 0.352	0.007 + 0.058	11.42
18.50-19.69	0.933 + 0.372	-0.128 + 0.068	10.15

TABLE 9.-CONCENTRATIONS OF NUTRIENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1986

CHARLES: LOUISIANA

TABLE 9.--CONCENTRATIONS OF NUTRIENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1986--CONTINUED

HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	DATE MAY 1986	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	METHYL-CHLO-RIDE TOTAL (UG/L)	METHYL-N-PROPYL-AMINE TOTAL (UG/L)	METHYL-ENE -SODI-PHENY-LAMINE TOTAL (UG/L)	N-NITRO-METHYL-LAMINE TOTAL (UG/L)	N-NITRO-SODI-METHYL-BENZENE TOTAL (UG/L)	PARA-CHLORO-META-CRESOL TOTAL (UG/L)
19... 19...	<5 ---	<5 ---	<10 ---	<5 ---	<0.2 0.3	4.0 ---	<5 ---	<5 ---	<5 ---
DATE MAY 1986	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,1,2-TETRA-CHLORO-ETHANE TOTAL (UG/L)	1,1,2,2-TETRA-CHLORO-ETHANE TOTAL (UG/L)	1,1,2,2-CHLOROPHENYL-ETHANE TOTAL (UG/L)	BENZO A ANTHRACENE TOTAL (UG/L)
19... 19...	<5 ---	0.3 4.0	<0.2 <0.2	<0.2 0.4	<0.2 0.5	<0.2 0.4	<0.2 0.6	<0.2 0.5	BENZOGH BENZANTHRACENE TOTAL (UG/L)
DATE MAY 1986	1,2-DI-CHLORO-BENZENE TOTAL (UG/L)	TRANSDI-CHLORO-ETHENE TOTAL (UG/L)	1,2,4-TRI-CHLORO-BENZENE TOTAL (UG/L)	1,2,4,6-TRI-CHLORO-BENZENE TOTAL (UG/L)	1,3-DI-CHLORO-BENZENE TOTAL (UG/L)	1,3,3-DI-CHLORO-BENZENE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)	2-CHLORO-NAPHTHALENE TOTAL (UG/L)
19... 19...	<5 <0.2	<0.2 <0.2	0.3 2.4	<5 ---	<10 ---	<0.2 <0.2	<5 <0.2	<0.2 <0.2	<5 ---
DATE MAY 1986	2-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L)	2,4-DI-METHYL-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4,6-TRI-CHLOROPHENOL TOTAL (UG/L)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L)	2,6-DI-NITROPHENYL ETHER TOTAL (UG/L)	4-BROMOPHENYL ETHER TOTAL (UG/L)	4-CHLOROPHENYL ETHER TOTAL (UG/L)
19... 19...	<6 ---	<10 ---	<6 ---	<6 ---	<5 ---	<20 ---	<5 ---	<5 ---	<5 ---

				BIS(2-ETHYLHEXYL)	DI-N-BUTYL	VINYL CHLORO-CHLO-	TRI-CHLORO-CHLORO-	HEXA-CHLORO-
				PHTHALATE	PHTHALATE	RIDE	ENE	BUT-ADIENE
				TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
4,6-DINITRO-DI-CHLORO- -ORTHO-DI-FLUORO-CRESOL	DATE	PHENOL (C6H-5OH) TOTAL (UG/L)	NAPHTH-ALENE TOTAL (UG/L)	PENTA-CHLOROPHENOL TOTAL (UG/L)	DI-N-BUTYL PHTHALATE TOTAL (UG/L)	VINYL CHLORO-CHLO- RIDE TOTAL (UG/L)	TRI-CHLORO-CHLORO- ENE TOTAL (UG/L)	HEXA-CHLORO- BUT-ADIENE TOTAL (UG/L)
1986 MAY 19 ...	19 ...	<30	<0.2	<6	<5	<30	<0.2	<5
		---	---	---	---	---	---	---

301244093171300 - INDUSTRIAL OUTFALL ABOVE I-210 BRIDGE NEAR MAPLEWOOD, LOUISIANA

TABLE 9.—CONCENTRATIONS OF NUTRIENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1986—CONTINUED

301230093180300 - BAYOU D'INDE AT CONFLUENCE WITH INDUSTRIAL OUTFALL

DATE	MAY 1986	HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	INDENO (1,2,3-CD) ISO-PYRENE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	METHYL-CHLORIDE TOTAL (UG/L)	METHYL-ENE PROPYL-AMINE TOTAL (UG/L)	N-NITRO-SODI-METHYL-PHENYL-LAMINE TOTAL (UG/L)	N-NITRO-SODI-METHYL-BENZENE TOTAL (UG/L)	PARA-CHLOROMETA-CRESOL TOTAL (UG/L)
		21...<5	21...<5	21...<5	21...<5	21...<5	21...<5	21...<5	21...<5
DATE	MAY 1986	PHENAN-THRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI-CHLORO-FLUORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,1,2-TETRA-CHLORO-ETHANE TOTAL (UG/L)	1,1,1,2,2-PERYL-ENE TOTAL (UG/L)	ANTHRACENE TOTAL (UG/L)
		21...<5	21...<5	21...<5	21...<5	21...<5	21...<5	21...<5	ENE1,1,2-BENZANTHACENE TOTAL (UG/L)
DATE	MAY 1986	1.2-DI-CHLOROBENZENE TOTAL (UG/L)	1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	1,2,4-THIOPHENE TOTAL (UG/L)	1,2,4-THIOPHENE TOTAL (UG/L)	1,3-DI-CHLORO-ANTHERA-CENE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)	2-CHLOROPHENOL TOTAL (UG/L)
		21...<5	21...<5	21...<5	21...<5	21...<5	21...<5	21...<5	2-CHLOROPHENOL TOTAL (UG/L)
DATE	MAY 1986	2-NITRO-PHENOL TOTAL (UG/L)	DL-N-OCTYL-PHTHALATE TOTAL (UG/L)	2,4-DI-CHLOROPHENOL TOTAL (UG/L)	2,4-DI-METHYL-NITRO-PHENOL TOTAL (UG/L)	2,4,-DI-NITRO-PHENOL TOTAL (UG/L)	2,6-DI-NITRO-PHENOL TOTAL (UG/L)	4-BROMOPHENYL TOTAL (UG/L)	4-CHLOROPHENYL TOTAL (UG/L)
		21...<6	21...<6	21...<6	21...<6	21...<6	21...<6	21...<6	21...<6

TABLE 9.--CONCENTRATIONS OF NUTRIENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1986--CONTINUED

301150093171600 - CALCASIEU RIVER AT BAYOU D'INDE, 2.8 MILES SOUTHEAST OF HOLLYWOOD, LOUISIANA										
DATE	TIME	DEPTH (FEET)	BIS (2-ETHYL-HEXYL)			TRI-CHLORO-CHLOROBUTENE			HEXA-CHLOROBUTADIENE TOTAL (UG/L) (UG/L)	
			DI-CHLORODI-FLUOROCRESOL TOTAL (UG/L)	PHENOL (C6H-5OH) TOTAL (UG/L)	NAPHTH-ALENE TOTAL (UG/L)	PENTA-CHLOROPHENOL TOTAL (UG/L)	CHLO-ATE TOTAL (UG/L)	VINYLRIDE TOTAL (UG/L)		
MAY 1986	21...:	<30	<0.2	<6	<5	<30	<5	<5	<0.2	6.8 <5
	21...:	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	6.1	<10
	21...:	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	5.8	<5
301150093171600 - CALCASIEU RIVER AT BAYOU D'INDE, 2.8 MILES SOUTHEAST OF HOLLYWOOD, LOUISIANA										
DATE	TIME	DEPTH (FEET)	NITRO-GEN, NO2+NO3			NITRO-GEN, NH4			CHROMIUM, TOTAL (UG/L) (AS CR)	
			TOT. DIS-SOLVED	TOT. BOT MAT (MG/L AS N)	AMMONIA GEN, AS N)	TOT. IN AMMONIA	DIS-SOLVED	PHOSPHOROUS TOTAL (MG/L AS P)		
MAY 1986	20...:	1730	1.6	0.20	0.23	2.0	0.33	45	0.09	
	20...:	1731	16.5	---	---	---	---	---	0.05	
	20...:	1732	33.0	---	---	---	---	---	7	
301150093171600 - CALCASIEU RIVER AT BAYOU D'INDE, 2.8 MILES SOUTHEAST OF HOLLYWOOD, LOUISIANA										
DATE	TIME	DEPTH (FEET)	CHRO-MIUM, RECOV. FM BOT-TOTAL (UG/L AS CR)			IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)			BROMO-CHLOROBUTANE TOTAL (UG/L) (AS CR)	
			SOLVED TOM MA-TERIAL (UG/L AS FE)	DIS-SOLVED (UG/L AS FE)	RECOV-ERABLE (UG/G AS HG)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	SUS-PENDED (UG/G AS HG)	ORGANIC CARBON, TOTAL (MG/L AS C)		
MAY 1986	20...:	<1	30	410	10000	<0.1	0.42	1.0	0.3	
	20...:	<1	---	---	---	---	---	0.5	<0.2	
	20...:	<1	---	---	---	---	---	0.2	2.1	
									2.1	
									6.7	
									3.9	
									3.9	
301150093171600 - CALCASIEU RIVER AT BAYOU D'INDE, 2.8 MILES SOUTHEAST OF HOLLYWOOD, LOUISIANA										
DATE	TIME	DEPTH (FEET)	CHLORO-BROMOMETHANE TOTAL (UG/L)			ACE-NAPHTH-YLENE TOTAL (UG/L)			BENZO-A-ETHYL ETHER TOTAL (UG/L)	
			TOTAL (UG/L)	TOTAL (UG/L)	BENZENE (UG/L)	AN-THENE (UG/L)	PHENYL (UG/L)	THENE (UG/L)		
MAY 1986	20...:	0.6	6.0	<0.2	<0.2	<5	<5	<10	<10	
	20...:	1.4	6.2	<0.2	<0.2	---	---	---	---	
	20...:	0.8	3.3	<0.2	<0.2	---	---	---	---	

	BIS (2-CHLORO-CYCLO-PENT-ADENE TOTAL (UG/L)	BIS (2-CHLORO-ISO-PROPYL) ETHER TOTAL (UG/L)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L)	CHLOROBENZENE TOTAL (UG/L)	CHLOROETHANE TOTAL (UG/L)	CHRYSENE TOTAL (UG/L)	DIETHYL PHTHALATE TOTAL (UG/L)				
DATE	MAY 1986	DATE	MAY 1986	DATE	MAY 1986	DATE	MAY 1986	DATE	MAY 1986	DATE	MAY 1986
20...:	<5	<5	<5	<5	<0.2	<0.2	<10	<5	<5	<0.2	<5
20...:	---	---	---	---	<0.2	<0.2	---	---	---	<0.2	---
20...:	---	---	---	---	<0.2	<0.2	---	---	---	<0.2	---
HEXA-CHLORO-CYCLO-PENT-ADENE TOTAL (UG/L)	INDENO (1,2,3-CD)	ISO-PYRENE TOTAL (UG/L)	METHYL PHORONE TOTAL (UG/L)	CHLOROBROMIDE TOTAL (UG/L)	CHLORO-RIDGE TOTAL (UG/L)	AMINE TOTAL (UG/L)	METHYL TOTAL (UG/L)	NITRO-ENE TOTAL (UG/L)	SODIUM-PROPYL-PHENYL TOTAL (UG/L)	-SODIUM-METHYL TOTAL (UG/L)	PARA-CHLOROMETA-CRESOL TOTAL (UG/L)
20...:	<3	<5	<10	<5	<0.2	<0.2	5.0	<5	<5	<5	<5
20...:	---	---	---	---	<0.2	3.4	---	---	---	---	---
20...:	---	---	---	---	3.3	---	---	---	---	---	---
TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUOROMETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,1,2-TRI-CHLORO-Ethane TOTAL (UG/L)	1,4-DI-CHLOROBENZENE TOTAL (UG/L)	1,4-DI-CHLOROBENZENE TOTAL (UG/L)	1,4-DI-CHLOROBENZENE TOTAL (UG/L)	1,4-DI-CHLOROBENZENE TOTAL (UG/L)	1,4-DI-CHLOROBENZENE TOTAL (UG/L)	1,4-DI-CHLOROBENZENE TOTAL (UG/L)	BENZO A BENZO B TOTAL (UG/L)
20...:	<5	<5	1.0	<0.2	<0.2	<0.2	0.2	0.2	0.2	0.2	<10 <10
20...:	---	---	0.6	<0.2	<0.2	<0.2	0.3	0.3	<0.2	<0.2	---
20...:	---	---	0.3	<0.2	<0.2	<0.2	0.2	0.2	<0.2	<0.2	---
1,2-DI-CHLORO-BENZENE TOTAL (UG/L)	1,2-DI-CHLOROPROPANE TOTAL (UG/L)	1,2,4-TRANS-DI-CHLORO-ETHENE TOTAL (UG/L)	1,2,4-DIBENZ-ANTHRA-CENE TOTAL (UG/L)	1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	1,3-DI-CHLOROBENZENE TOTAL (UG/L)	1,4-DI-CHLOROBENZENE TOTAL (UG/L)	1,4-DI-CHLOROBENZENE TOTAL (UG/L)	1,4-DI-CHLOROBENZENE TOTAL (UG/L)	1,4-DI-CHLOROBENZENE TOTAL (UG/L)	1,4-DI-CHLOROBENZENE TOTAL (UG/L)	2-CHLORO-2-CHLOROPHENOL TOTAL (UG/L)
20...:	<5	<0.2	<0.2	0.3	<5	<10	<0.2	<5	<5	<0.2	<6
20...:	<0.2	<0.2	0.3	---	---	---	<0.2	<0.2	<0.2	<0.2	---
20...:	<0.2	<0.2	0.3	---	---	---	<0.2	<0.2	<0.2	<0.2	---

TABLE 9.—CONCENTRATIONS OF NUTRIENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1986—CONTINUED



TABLE 9.—CONCENTRATIONS OF NUTRIENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1986--CONTINUED

08017090 - CALCASIEU RIVER AT BURTON LANDING NEAR LAKE CHARLES. LOUISIANA

DATE	IRON, MIUM, RECOV.	IRON, TOTAL FM BOT- RECOV-	IRON, DIS- RECOV.	IRON, FM BOT- RECOV.	MERCURY			CARBON			DI-		
					RECOV.	FM BOT- RECOV.	TOTAL	RECOV.	CHLO- BROMO-	TETRA-	1,2-DI-	CHLORO-	BROMO-
MAY 1986	SOLVED (UG/L AS CR)	TOM MA- TERIAL (UG/G)	ERABLE (UG/L AS FE)	SOLVED (UG/L AS FE)	TOM MA- TERIAL (UG/G AS HG)	RECOV. TERIAL (UG/G AS HG)	TOTAL TOM MA- TERIAL (UG/G AS HG)	RECOV. TERIAL (UG/G AS HG)	CHLO- BROMO-	TETRA-	1,2-DI-	CHLORO-	BROMO-
21... 21... 21...	<1 --- ---	20 --- ---	960 --- ---	60 --- ---	10000 --- ---	<0.1 --- ---	0.12 --- ---	1.6 --- ---	0.6 0.7 0.7	<0.2 0.7 0.7	1.9 0.2 0.2	1.2 2.2 2.2	15 28 28
BIS													
DATE	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)	CHLORO- FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	NAPHTH- YLENE TOTAL (UG/L)	ANTHRA- CENE TOTAL (UG/L)	ACE- NAPHTH- ENE TOTAL (UG/L)	FLUOR- AN- THENE TOTAL (UG/L)	BENZO K BENZO B	BENZO K BENZO B	CHLORO- ETHYL A- ETHER	BENZO-	CHLORO-
MAY 1986	21... 21... 21...	1.8 2.1 2.2	8.8 7.7 4.3	0.3 <0.2 <0.2	<0.2 <0.2 <0.2	<5 --- ---	<5 --- ---	<5 --- ---	<10 --- ---	<10 --- ---	<5 --- ---	---	2-
DATE	BIS (2- CHLORO- ETHOXY) METHANE TOTAL (UG/L)	BIS ISO- BENZYL PROPYL ETHER TOTAL (UG/L)	PHTHAL- ATE BENZENE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)	CHRY- SENE TOTAL (UG/L)	DIETHYL- PHTHAL- ATE TOTAL (UG/L)	FLUOR- ETHYL- BENZENE TOTAL (UG/L)	FLUOR- ENE TOTAL (UG/L)	FLUOR- ANTHENE TOTAL (UG/L)	FLUOR- ENE TOTAL (UG/L)	---	---
MAY 1986	21... 21... 21...	<5 --- ---	5 --- ---	<5 --- ---	<0.2 <0.2 <0.2	<0.2 <0.2 <0.2	<10 --- ---	<5 --- ---	<5 --- ---	<0.2 0.2 0.2	<5 --- ---	---	---
DATE	HEXA- CHLORO- CYCLO- PENT- ADIENE TOTAL (UG/L)	HEXA- CHLORO- ETHANE TOTAL (UG/L)	INDENO- (1,2,3- CD) PYRENE TOTAL (UG/L)	ISO- PHORONE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	CHLO- RIDE TOTAL (UG/L)	METHYL- ENE TOTAL (UG/L)	NITRO- SODI- PHENY- AMINE TOTAL (UG/L)	N-NITRO- SODI- LAMINE TOTAL (UG/L)	N-NITRO- LAMINE TOTAL (UG/L)	PARA- CHLORO- META- CRESOL TOTAL (UG/L)	---	---
MAY 1986	21... 21... 21...	<5 --- ---	5 --- ---	<10 --- ---	<5 --- ---	<0.2 <0.2 <0.2	9.2 1.8 3.2	<5 --- ---	<5 --- ---	<5 --- ---	<5 --- ---	---	---

TABLE 9.-CONCENTRATIONS OF NUTRIENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1986--CONTINUED

## IN SITU WATER-QUALITY MEASUREMENTS, MAY 19-22, 1986

SITE NAME, TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SALINITY (PPT)	ORP (MV)
CALCASIEU RIVER AT BUOY 130 1600	1.6 5.0	24.4 24.1	6.7 6.8	3.7 3.3	4,300 5,160	1.9 2.3	+140 +140
CALCASIEU RIVER 100 FT DOWNSTREAM FROM BAYOU D'INDE 1530	3.6	28.3	7.6	7.9	10,600	5.3	+134
BAYOU D'INDE AT MOUTH 1550	3.3	26.7	7.7	8.0	8,800	4.6	+131
INDUSTRIAL OUTFALL AT BAYOU D'INDE 1610	7.3	27.4	7.8	8.3	9,820	5.2	+091
INDUSTRIAL OUTFALL AT BRIDGE 0.25 MILE ABOVE MOUTH 1630	8.2	35.0	7.3	6.2	12,900	7.1	+138
INDUSTRIAL OUTFALL AT LOCKPORT MARSH BRIDGE 0900	3.3	34.1	7.6	5.2	12,570	7.0	+184
CALCASIEU RIVER AT BUOY D'INDE 1730	1.6 41.2	26.4 24.5	8.0 7.1	9.0 4.1	8,010 31,500	4.1 12.9	+114 +145
CALCASIEU RIVER AT BUOY 130 SHIP CHANNEL 1800	1.6 42.9	26.8 25.4	7.0 7.6	6.8 3.0	4,740 28,700	2.1 17.5	+158 +127
CALCASIEU RIVER AT BURTON LANDING 1800	1.6 21.1	26.3 24.2	8.5 7.9	10.7 5.5	16,600 27,800	9.7 16.8	+141 +156
CALCASIEU RIVER AT PETROLEUM REFINERY 11.2 1030	1.6 25.0	25.5 25.0	8.0 7.8	10.7 5.4	16,600 20,800	9.7 16.8	+141 +156

TABLE 9.--CONCENTRATIONS OF NUTRIENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1986--CONTINUED

[ORGANIC CARBON, IN MILLIGRAMS PER LITER]

FRACTIONATION OF DISSOLVED ORGANIC CARBON INTO HYDROPHILIC AND HYDROPHOBIC COMPONENTS FROM THE LOWER CALCASIEU RIVER, LOUISIANA

SITE NAME	DISSOLVED ORGANIC CARBON	HYDROPHOBIC FRACTION	HYDROPHILIC FRACTION
CALCASIEU RIVER AT BUOY 130	9.5	4.6	4.9
CALCASIEU RIVER AT BAYOU D'INDE	6.1	2.7	3.4
BAYOU D'INDE AT INDUSTRIAL OUTFALL	6.4	2.3	4.1
CALCASIEU RIVER AT PETROLEUM REFINERY	6.5	2.3	4.2
CALCASIEU RIVER AT BURTON LANDING	5.8	2.4	3.4

TABLE 10.--TOTAL TRACE-METAL CONCENTRATION PROFILES FOR CORE SAMPLES FROM THE LOWER CALCASIEU RIVER, LOUISIANA, MAY 1986

[CONCENTRATIONS IN MICROGRAMS PER GRAM,  
DEPTH IN INCHES FROM SURFACE]

SITE	DEPTH (INCHES)	IRON	MANGANESE	CHROMIUM	MERCURY
CALCASIEU RIVER AT BUOY 130	0- 1	1.7	89	33	0.020
	1- 2	2.2	130	50	0.030
	8- 9	3.2	310	62	0.050
	17-18	3.6	290	76	0.070
CALCASIEU RIVER AT BAYOU D'INDE	0- 1	3.4	650	82	0.97
	1- 2	3.8	690	83	0.57
	3- 4	3.4	690	150	0.68
	15-16	2.7	670	69	0.62
	31-32	0.84	130	30	0.36
CALCASIEU RIVER AT PETROLEUM REFINERY	0- 1	1.7	190	93	0.090
	1- 2	2.0	210	89	<0.005
	2- 3	1.9	270	42	<0.005
	16-17	2.2	210	120	0.020
CALCASIEU RIVER AT BURTON LANDING	0- 1	2.4	470	78	0.030
	1- 2	2.9	730	97	0.020
	8- 9	3.3	900	100	0.030
	18-19	2.1	340	58	0.040

TABLE 11.--CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, APRIL 1987

301404093144800 - CALCASIEU RIVER AT BUOY 130 AT LAKE CHARLES, LOUISIANA

	METHYL- ENE	TETRA- CHLORO- ETHYL-	1,3-DI- CHLORO- ETHYL-	TRANS- CHLORO- FLUORO- METHANE	TRI- CHLORO- FLUORO- METHANE	XYLENE TOTAL
DATE	METHYL- BROMIDE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	PROPENE TOTAL (UG/L)	WATER WHOLE REC (UG/L)
APR 1987	<0.2	0.2	2.0	1.0	<0.2	0.5
15...	0.2	0.2	2.7	1.0	<0.2	0.5
15...					<0.2	0.7

	1,1,1- TRI- CHLORO- ETHANE	1,1,2- TETRA- CHLORO- ETHANE	1,2-DI- CHLORO- BENZENE	1,2-DI- CHLORO- PROPANE	1,3-DI- CHLORO- BENZENE	1,4-DI- CHLORO- BENZENE	1,2- CHLORO- VINY- ETHER
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
APR 1987	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
15...	0.5	12	7.7	4.7	<0.2	39	<0.2
15...	0.5	13	7.8	5.2	<0.2	40	<0.2
15...							

301234093174900 - INDUSTRIAL OUTFALL CANAL AT BRIDGE, 0.25 MILE ABOVE MOUTH

	CARBON- TETRA- CHLORO- RIDE	CHLORO- DI- BROMO- METHANE	CHLORO- FORM	CHLORO- ETHANE	CHLORO- PROPENE	CIS CHLORO- PROPENE	DI- CHLORO- BROMO- METHANE
DATE	SAM- PLING DEPTH (FEET)	BROMO- FORM TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)
APR 1987	1340	1.6	<0.2	4.20	<0.2	4.8	0.2
15...	1341	3.3	<0.2	4.20	<0.2	4.7	0.2
15...							

	METHYL- ENE	TETRA- CHLORO- ETHYL-	1,3-DI- CHLORO- ETHYL-	TRANS- CHLORO- FLUORO- METHANE	TRI- CHLORO- FLUORO- METHANE	XYLENE TOTAL
DATE	METHYL- BROMIDE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	PROPENE TOTAL (UG/L)	WATER WHOLE REC (UG/L)
APR 1987	<0.2	0.2	1.8	<0.2	1.0	<0.2
15...	<0.2	0.2	1.8	<0.2	1.0	<0.2
15...						

TABLE 11.--CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER FROM THE LOWER CALCASIEU RIVER  
AND BAYOU D'INDE AREA, LOUISIANA, APRIL 1987--CONTINUED

301230093180300 - BAYOU D'INDE AT CONFLUENCE WITH INDUSTRIAL OUTFALL										CIS-1,3-DI-CHLORO-BROMO-METHANE			
DATE	TIME	PLING (FEET)	SAM-	CARBON-CHLORO-DI-CHLORO-				CIS-1,3-DI-CHLORO-BROMO-METHANE					
				BENZENE	BROMO- FORM	CHLORO- RIDE	CHLORO- BROMO-	CHLORO- ETHANE	CHLORO- FORM	METHYL- CHLO- RIDE	1,3-DI- CHLORO- PROPENE	TOTAL	
APR 1987	15..	0.5	1.1-TRI-CHLORO-ETHANE	1,1,1-TRI-CHLORO-ETHANE	1,1,2-TETRA-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,3-DI-CHLORO-ETHANE	1,4-DI-CHLORO-ETHANE	1,4-DI-CHLORO-ETHANE	1,2-CHLORO-ETHYL-ETHER	1,2-CHLORO-ETHYL-ETHER	
	15..	0.5	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	
APR 1987	15..	0.5	9.7	6.4	4.8	<0.2	32	<0.2	<0.2	<0.2	<0.2	<0.2	
	15..	9.5	6.3	4.5	<0.2	31	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	
APR 1987	15..	1.6	0.4	110	<0.2	<0.2	36	<0.2	19	<0.2	5.2	<0.2	
	15..	8.2	<0.2	120	<0.2	<0.2	14	<0.2	8.4	<0.2	2.6	<0.2	
APR 1987	1415	1416	1.1,1-TRI-CHLORO-ETHANE	1,1,2-TETRA-CHLORO-ETHYL-ENE	1,2-DI-CHLORO-ETHYL-ENE	1,3-DI-CHLORO-ETHYL-ENE	1,3-DI-CHLORO-ETHYL-ENE	1,4-DI-CHLORO-ETHYL-ENE	1,4-DI-CHLORO-ETHYL-ENE	1,4-DI-CHLORO-ETHYL-ENE	1,4-DI-CHLORO-ETHYL-ENE	1,4-DI-CHLORO-ETHYL-ENE	
			TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	
APR 1987	15..	0.8	<0.2	1.7	<0.2	8.7	1.2	<0.2	7.1	<0.2	0.4	1.4	
	15..	<0.2	<0.2	0.5	<0.2	4.1	<0.2	<0.2	3.1	<0.2	0.2	<0.2	
APR 1987	15..	0.6	7.9	5.4	4.2	<0.2	30	<0.2	<0.2	<0.2	<0.2	<0.2	
	15..	0.8	2.6	3.6	1.9	<0.2	18	<0.2	<0.2	<0.2	<0.2	<0.2	

## 301210093173900 - BAYOU D'INDE, 0.5 MILE ABOVE MOUTH

DATE	TIME	SAM-	BENZENE	CARBON-	CHLORO-	METHYL-	CIS	DI-
		PLING	TOTAL	TETRA-	DI-	CHLORO-	1,3-DI-	CHLORO-
DATE	DEPTH			CHLO-	BROMO-	CHLORO-	CHLORO-	CHLORO-
	(FEET)		(UG/L)	RIDE	METHANE	ETHANE	PROPENE	BROMO-
				TOTAL	TOTAL	TOTAL	TOTAL	METHANE
				(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
APR 1987	1515	1.6	<0.2	53	<0.2	<0.2	6.4	<0.2
15...	1516	9.9	<0.2	37	<0.2	<0.2	5.6	<0.2
							3.2	<0.2
							3.2	<0.2
							<0.2	1.2
								<0.2
APR 1987	15...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
APR 1987	15...	<0.2	1.0	0.8	<0.2	<0.2	4.6	<0.2
		<0.2	1.0	0.8	<0.2	<0.2	4.6	<0.2
							<0.2	<0.2

DATE	TIME	SAM-	BENZENE	CARBON-	CHLORO-	METHYL-	CIS	DI-
		PLING	TOTAL	TETRA-	DI-	CHLORO-	1,3-DI-	CHLORO-
DATE	DEPTH			CHLO-	BROMO-	CHLORO-	CHLORO-	CHLORO-
	(FEET)		(UG/L)	RIDE	METHANE	ETHANE	PROPENE	BROMO-
				TOTAL	TOTAL	TOTAL	TOTAL	METHANE
				(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
APR 1987	1540	1.6	<0.2	55	<0.2	<0.2	6.8	<0.2
15...	1541	26.4	<0.2	9.0	<0.2	<0.2	1.6	<0.2
							3.7	<0.2
							0.9	<0.2
								1.5
								<0.2
								0.3
								<0.2

## 301145093172800 - CALCASIEU RIVER, 0.25 MILE BELOW BAYOU D'INDE

TABLE 11. - CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, APRIL 1987--CONTINUED

DATE	TIME	SAMPLE	DEPTH (FEET)	METHYL-	TETRA-	TRANS-	TRI-	XYLENE	1,1-DI-
				ENE	CHLORO-	CHLORO-	CHLORO-	VINYL	CHLORO-
BENZENE	BROMIDE	CHLORIDE	STYRENE	ENE	ETHYL-	FLUORO-	CHLORO-	WATER	ETHYL-
TOTAL	TOTAL	TOTAL	TOTAL	TOLUENE	PROPENE	ENE	METHANE	WHOLE	ENE
(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	TOTAL
APR 1987	15... 15...	<0.2 <0.2	<0.2 <0.2	<0.2 <0.2	1.7 0.3	<0.2 <0.2	1.4 0.3	<0.2 <0.2	<0.2 <0.2
1,1-DI-	1,1,1-	1,1,2-	1,1,2,2	1,2-DI-	1,2-DI-	1,3-DI-	1,4-DI-	1,2-	2-CHLORO-
CHLORO-	TRI-	TETRA-	CHLORO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-	TRANS	DI-ETHYL-
ETHANE	CHLORO-	CHLORO-	ETHANE	ETHANE	PROPANE	BENZENE	PROPENE	CHLORO-	CHLORO-
TOTAL	ETHANE	ETHANE	TOTAL	BENZENE	TOTAL	TOTAL	BENZENE	ETHENE	VINYL-ETHER
(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	TOTAL
APR 1987	15... 15...	<0.2 <0.2	1.1 0.3	1.2 0.2	<0.2 <0.2	5.3 1.4	<0.2 <0.2	0.2 0.2	<0.2 0.2
300957093190800	-	CALCASIEU RIVER AT PETROLEUM REFINERY							
DATE	TIME	SAMPLE	PLING	BROMO-	CARBON-	CHLORO-	METHYL-	CIS	DI-CHLORO-
			DEPTH	FORM	TETRA-	DI-	CHLORO-	1,3-DI-	DI-CHLORO-
			(FEET)	TOTAL	CHLO-	BROMO-	CHLORO-	CHLORO-	CHLORO-
				(UG/L)	RIDE	BENZENE	ETHANE	CHLORO-	FLUORO-
					TOTAL	TOTAL	TOTAL	PROPENE	METHANE
APR 1987	1650 1651	1.6 23.1	<0.2 <0.2	12 5.3	<0.2 <0.2	2.0 0.9	<0.2 <0.2	<0.2 <0.2	<0.2 0.2
1,1-DI-	METHYL-	METHYL-	TETRA-	TRANS-	TRI-	CHLORO-	VINYL	XYLENE	1,1-DI-
CHLORO-	BROMIDE	CHLORIDE	CHLORO-	1,3-DI-	CHLORO-	CHLORO-	CHLORO-	WATER	CHLORO-
ETHANE	TOTAL	STYRENE	ENE	CHLORO-	CHLORO-	ETHYL-	FLUORO-	WHOLE	ETHYL-
TOTAL	(UG/L)	TOTAL	TOTAL	ETHYL-	PROPENE	ENE	METHANE	TOTAL	ENE
(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	TOTAL
APR 1987	15... 15...	<0.2 <0.2	<0.2 <0.2	0.4 0.2	<0.2 <0.2	0.4 0.2	<0.2 <0.2	<0.2 0.2	<0.2 0.2

08017090 - CALCASIEU RIVER AT BURTON LANDING NEAR LAKE CHARLES, LOUISIANA

TABLE 11.--CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, APRIL 1987--CONTINUED

IN SITU WATER-QUALITY MEASUREMENTS, APRIL 15, 1987

SITE NAME, TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SAL- COND (US/CM) (PPT)	SPEC INITY (MV)
CALCASIEU RIVER AT BUOY 130	1.6 9.9 19.8	19.1 19.0 18.9	7.1 7.4 7.4	7.3 5.4	5,200 7,650 14,800	2.4 3.9 8.2
INDUSTRIAL OUTFALL AT LOCKPORT MARSH BRIDGE	1.6 3.3	30.6 30.6	7.0 7.0	7.3 7.7	12,970 13,080	7.0 7.2
INDUSTRIAL OUTFALL AT BRIDGE 0.25 MILE ABOVE BAYOU D'INDE	1.6 3.3	29.7 29.7	7.1 7.1	8.4 9.1	13,070 13,050	7.2 7.2
INDUSTRIAL OUTFALL AT BAYOU D'INDE	1.6 3.3 8.2	29.4 29.4 28.0	7.4 7.4 7.4	9.0 8.6 8.8	13,120 13,100 13,050	7.3 7.2 7.0
BAYOU D'INDE AT MOUTH	1.6 5.0 9.2	24.6 22.7 22.0	8.8 8.6 8.4	9.4 9.5 9.0	12,300 12,290 12,330	6.7 6.7 6.7
CALCASIEU RIVER 0.25 MILE BELOW BAYOU D'INDE	1.6 9.9 16.5 26.4 39.6	22.1 21.8 19.5 18.3 17.1	8.6 8.6 7.9 7.7 7.6	10.3 9.6 9.5 3.7 2.7	12,220 12,000 13,500 22,800 29,500	6.7 6.6 7.2 13.7 18.1
CALCASIEU RIVER AT PETROLEUM REFINERY	1.6 9.9 23.1 36.3	20.6 19.8 19.1 18.1	8.7 8.3 8.0 7.8	10.4 7.6 5.9 3.8	14,240 15,600 17,300 29,400	8.0 8.8 10.0 18.2
CALCASIEU RIVER AT BURTON LANDING	1.6 9.9 23.1 36.3	20.5 19.7 18.9 18.8	8.4 8.0 7.8 7.9	8.6 8.5 8.5 8.8	12,500 14,200 21,500 29,300	6.8 8.0 12.4 18.1

TABLE 12.--CONCENTRATIONS OF METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE, LOUISIANA, APRIL 1987

OUTFALL INDUSTRIAL CONFLUENCE WITH BAYOU D'INDE AT 3180300 - 318093180300

TABLE 12.--CONCENTRATIONS OF METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE, LOUISIANA, APRIL 1987--CONTINUED

				BIS(2- DINITRO- PHENOL (C6H- 5OH))	PENTA- CHLORO- PHENOL	DI-N- ETHYL HEXYL)	DI-N- BUTYL	EXA- CHLORO- BENZENE	HEXA- CHLORO- BENZENE
				(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	TOT. IN	BUT- TOL.
				BOT. MAT	BOT. MAT	BOT. MAT	BOT. MAT	ADIENCE	ADIENCE
DATE	DATE	DATE	DATE	(UG/L)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)
APR 1987	15...	<270	<270	<1600	<1600	<270	<1600	14000	<270
	15...	---	14000	<1600	<1600	<260	<1600	13000	<260
	15...	---	14000	<1600	<1600	<270	<1600	14000	<270

ANALYSES AT 1400 ARE FROM TOTAL ELUTRIATE SAMPLES, ANALYSES AT 1401 ARE FROM DISSOLVED ELUTRIATE SAMPLES, ANALYSES AT 1405 ARE FROM NATIVE (TOTAL) WATER SAMPLES

ANALYSES AT 1300 ARE FROM DISSOLVED ELUTRIATE SAMPLES, ANALYSES AT 1301 ARE FROM TOTAL ELUTRIATE SAMPLES, ANALYSES AT 1100 ON APRIL ARE FROM NATIVE (TOTAL) WATER SAMPLES

TABLE 12.--CONCENTRATIONS OF METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE, LOUISIANA, APRIL 1987--CONTINUED

DATE	DIETHYL PHTHAL- ATE TOTAL (UG/L)	DI- METHYL PHTHAL- ATE TOTAL (UG/L)	HEXA- CHLORO- CYCLO- PENT- ADIENE TOTAL (UG/L)	HEXA- CHLORO- ETHANE PYRENE TOTAL (UG/L)	INDENO (1,2,3- CD) ISO- PHORONE TOTAL (UG/L)	NITRO- SODI- PHENY- AMINE TOTAL (UG/L)	N- NITRO- SODI- METHY- LAMINE TOTAL (UG/L)	N- NITRO- SODI- BENZENE TOTAL (UG/L)	
APR 1987	15... 15... 15... 16...	<5.0 <5.0 <5.0 <5.0	<5.0 <5.0 <5.0 <5.0	<5.0 <5.0 <5.0 <5.0	<5.0 <5.0 <5.0 <5.0	<10 <10 <10 <10	<5.0 <5.0 <5.0 <5.0	<5.0 <5.0 <5.0 <5.0	<5.0 <5.0 <5.0 <5.0
DATE	PARA- CHLORO- META- CRESOL TOTAL (UG/L)	PHENAN- THRENE TOTAL (UG/L)	PERYL -BENZOP ERYLLENE TOTAL (UG/L)	ANTHRAC -BENZANT HRACENE TOTAL (UG/L)	ANTHRA -CHLORO- BENZENE TOTAL (UG/L)	DIBENZ -ANTHRA -CENE TOTAL (UG/L)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L)	2- CHLORO- NAPH- THALENE TOTAL (UG/L)
APR 1987	15... 15... 15... 16...	<30 <30 <30 <30	<5.0 <5.0 <5.0 <5.0	<10 <10 <10 <10	<5.0 <5.0 <5.0 <5.0	<10 <5.0 <5.0 <5.0	<5.0 <5.0 <5.0 <5.0	<5.0 <5.0 <5.0 <5.0	<5.0 <5.0 <5.0 <5.0
DATE	2- CHLORO- PHENOL TOTAL (UG/L)	2- NITRO- PHENOL TOTAL (UG/L)	DI-N- OCTYL -PHTHAL- ATE TOTAL (UG/L)	2,4-DI- CHLORO- PHENOL TOTAL (UG/L)	2,4-DI- NITRO- TOLUENE TOTAL (UG/L)	2,4- DI- NITRO- PHENOL TOTAL (UG/L)	2,6-DI- CHLORO- TOLUENE TOTAL (UG/L)	2,6-DI- NITRO- DIME TOTAL (UG/L)	2,6-DI- CHLORO- PHENYL PHENYL BENZI-L- ETHER TOTAL (UG/L)
APR 1987	15... 15... 15... 16...	5.0 5.0 5.0 5.0	<5.0 <5.0 <5.0 <5.0	<5.0 <5.0 <5.0 <5.0	<5.0 <5.0 <5.0 <5.0	<20 <20 <20 <20	<20 <20 <20 <20	<5.0 <5.0 <5.0 <5.0	<25 <25 <25 <25
DATE	4- CHLORO- PHENYL ETHER TOTAL (UG/L)	4- NITRO- PHENOL TOTAL (UG/L)	4,6- DINITRO -ORTHO- CRESOL TOTAL (UG/L)	PHENOL (C6H- 5OH) TOTAL (UG/L)	PENTA- CHLORO- ALENE TOTAL (UG/L)	ETHYL HEXYL -PHTHAL- ATE TOTAL (UG/L)	DI-N- BUTYL -PHTHAL- ATE TOTAL (UG/L)	DI-N- BENZI- DINE TOTAL (UG/L)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L)
APR 1987	15... 15... 15...	5.0 5.0 5.0	<30 <30 <30	<5.0 <5.0 <5.0	<5.0 <5.0 <5.0	<30 <30 <30	<5.0 <5.0 <5.0	<50 <50 <50	<5.0 13 <5.0

## 301210093173900 - BAYOU D'INDE 0.5 MILE ABOVE MOUTH

ANALYSES AT 1200 ARE FROM TOTAL ELUTRIATE SAMPLES, ANALYSES AT 1503 ARE FROM NATIVE (WHOLE) WATER SAMPLES.  
DISSOLVED ANALYSES WERE RUINED DURING ANALYSIS.

DATE	TIME	BENZO B				BENZO K				BIS (2-CHLORO-				BIS (2-			
		ACE-	ACE-	ANTHRA-	BENZO-	CHLORO-	CHLORO-	ISO-	N-BUTYL-	NAPHTH-	NAPHTH-	AN-	ETHYL-	CHLORO-	ISO-	PHTHAL-	CHRY-
APR 1987																	
15... 15...	1200 1503	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<10 <10	<10 <10	<10 <10	<10 <10	<10 <10	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<10 <10
DATE	TIME	DI-ETHYL-PHTHAL-ATE	TOTAL	FLUOR-ANTHENE	TOTAL	FLUOR-ENE	TOTAL	HEXA-CHLORO-CYCLO-PENT-ADIENE	INDENO-(1,2,3-CD)	ISO-PROPYL-PHENONE	ISO-PHORONE	PHENYL-AMINE	LAMINE	NITRO-LAMINE	-SODIUM-PROPYL	NITRO-BENZENE	
APR 1987																	
15... 15...	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<10 <10	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0
DATE	TIME	PARA-CHLORO-META-CRESOL	TOTAL	PHENAN-THRENE	TOTAL	PYRENE	TOTAL	ERYLENE	BENZANTHRACENE	CHLOROBENZENE	BENZENE	CENE	BENZENE	BENZENE	CHLORO-ANTHRA	CHLORO-CHLORO-	2-CHLORO-NAPH-
APR 1987																	
15... 15...	<30 <30	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<10 <10	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<10 <10	<5.0 <5.0	<5.0 <5.0	1,2-DIBENZ	1,3-DI-CHLORO-	1,4-DI-CHLORO-
DATE	TIME	2-CHLORO-PHENOL	TOTAL	2-NITRO-PHENOL	TOTAL	2,4-DI-CHLORO-ATE	TOTAL	2,4-DI-METHYL-PHENOL	TOLUENE	NITRO-PHENOL	TOLUENE	PHENOL	TOLUENE	2,6-DI-CHLORO-	2,6-DI-NITRO-	3,3'-DI-CHLORO-	4-BROMO-
APR 1987																	
15... 15...	<5.0 <5.0	<5.0 <5.0	<10 <10	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<5.0 <5.0	<20 <20	<20 <20	<20 <20	<20 <20	<20 <20	<20 <20	<25 <25	<25 <25	<5.0 <5.0

TABLE 12.--CONCENTRATIONS OF METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE, LOUISIANA, APRIL 1987--CONTINUED

IN SITU WATER-QUALITY READINGS, APRIL 15-16, 1987

SITE NAME, TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
BAYOU D'INDE AT MOUTH 1500	1.6 6.0 9.2	24.6 22.7 22.0	8.8 8.6 8.4	9.4 9.5 9.0	12,300 12,290 12,330	6.7 6.7 6.7	+173 +174 +177
CALCASIEU RIVER NEAR KINDER 1100	1.6	18.8	7.2	7.8	57	0.0	+084
		April 15, 1987					
		April 16, 1987					

TABLE 13.--CONCENTRATIONS OF METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN BOTTOM MATERIAL

[TRIPPLICATE CONTROL SAMPLES THAT WERE NOT IRRADIATED, AND NOT INCUBATED, ARE FOUND IN TABLE 12]

## 301230093180300 - BAYOU D'INDE AT CONFLUENCE WITH INDUSTRIAL OUTFALL

DATE	TIME	ACE-NAPHTH-YLENE BOT.MAT (UG/KG)	ACE-NAPHTH-ENE BOT.MAT (UG/KG)	BENZO B FLUOR-AN-THENE BOT.MAT (UG/KG)	BENZO K FLUOR-AN-THENE BOT.MAT (UG/KG)	BENZO A PYRENE BOT.MAT (UG/KG)	BENZO-CHLORO-ETHYL) PHTHAL-ETHER	BIS-(2-CHLORO-ETHYL) PHTHAL-ETHER	BIS-(2-CHLORO-ETHYL) PHTHAL-ETHER	BIS-(2-CHLORO-ETHYL) PHTHAL-ETHER
				(UG/KG)	(UG/KG)	(UG/KG)	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	N-BUTYL BENZYL ISOPROPYL
TRIPPLICATE SAMPLES THAT WERE IRRADIATED, BUT NOT INCUBATED										
APR 1987 15... 15... 15... 15...	1000 1001 1002 1002	<350 <380 <200 7600	<350 <380 <200 7600	<700 <770 <400 <400	<700 <770 <400 <400	<700 <770 <400 <400	<350 <380 <200 <200	<350 <380 <200 <200	<350 <380 <200 <200	<700 <770 <400
TRIPPLICATE SAMPLES THAT WERE NOT IRRADIATED, BUT WERE INCUBATED AT 20 DEGREES CELSIUS FOR 60 DAYS.										
JUL 04... 04... 04... 04...	1000 1001 1002 1002	<200 <210 <200 <200	<200 <210 <200 <200	<400 <400 <400 <400	<400 <400 <400 <400	<400 <400 <400 <400	<200 <210 <200 <200	<200 <210 <200 <200	<200 <210 <200 <200	<400 <400 <400 <400
TRIPPLICATE SAMPLES THAT WERE IRRADIATED AND INCUBATED AT 20 DEGREES CELSIUS FOR 60 DAYS.										
JUL 08... 08... 08... 08...	1200 1201 1202 1202	<200 <200 <180 <180	<200 <200 <180 <180	<200 <200 <180 <180	<500 <400 <350	<500 <400 <350	<200 <200 <180	<200 <200 <180	<200 <200 <180	<500 <400 <350
HEXA-CHLORO-CYCLO-PENT-ADIENE BOT.MAT (UG/KG)										
APR 1987 15... 15... 15... 15...	DI-METHYL-PHTHAL-ATE BOT.MAT (UG/KG)	<350 <380 <200 <200	3700 <380 4600	<350 <380 11000	<350 <380 <200	<350 <380 <200	<700 <770 <400	<350 <380 <200	<350 <380 <200	<350 <380 <200
JUL 04... 04... 04... 04...	DIETHYL-PHTHAL-ATE BOT.MAT (UG/KG)	<200 <210 <200 <200	<200 <210 3800 4700	<200 <210 <200 <180	<200 <210 <200 <180	<200 <210 <200 <180	<400 <400 <400 <400	<200 <210 <200 <180	<200 <210 <200 <180	<200 <210 <200 <180
INDENO (1,2,3-CD) ISO-PYRENE PHORONE BOT.MAT (UG/KG)										
APR 1987 15... 15... 15... 15...	DI-CHLORO-ADILENE BOT.MAT (UG/KG)	<350 <380 <200 <200	3700 <380 4600	<350 <380 11000	<350 <380 <200	<350 <380 <200	<700 <770 <400	<350 <380 <200	<350 <380 <200	<350 <380 <200
JUL 08... 08... 08... 08...	N-NITRO-SODI-N-PROPYL-LAMINE BOT.MAT (UG/KG)	<200 <210 3800 3700	<200 <210 <200 <180	<200 <210 <200 <180	<200 <210 <200 <180	<200 <210 <200 <180	<200 <210 <200 <180	<200 <210 <200 <180	<200 <210 <200 <180	<200 <210 <200 <180
N-NITRO-SODI-N-METHYL-LAMINE BOT.MAT (UG/KG)										

TABLE 13.--CONCENTRATIONS OF METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN BOTTOM MATERIAL  
FROM BAYOU D'INDE, LOUISIANA, APRIL-JULY 1987--CONTINUED

DATE	PARA-CHLORO-META-CRESOL-BOT.MAT (UG/KG)	PHENAN-THRENE-BOT.MAT (UG/KG)	PYRENE-BOT.MAT (UG/KG)	BENZO A I PERYL ANTHRACENE 1,2-DI-BENZANT CHLORO-BENZENE BENZENE BOT.MAT BOT.MAT (UG/KG)	1,2,4-TRI-ANTHRA-CHLORO-CENE BOT.MAT BOT.MAT (UG/KG)	1,2,5,6-DIBENZ-1,3-DI-CHLORO-BENZENE BOT.MAT BOT.MAT (UG/KG)
<b>APR 1987</b>						
15...	<350	<2100	<350	<700 <350	<700 <350	<350 <350
15...	<380	<2300	<380	<770 <380	<770 <380	<380 <380
15...	<200	<1200	<200	<400 <200	<400 <200	<200 <200
JUL						
04...	<200	<1200	<200	<400 <200	<400 <200	<200 <200
04...	<210	<1300	<210	<400 <210	<400 <210	<210 <210
04...	<200	<1100	4000	<400 <200	<400 <200	<200 <200
JUL						
08...	<200	<1400	<200	<500 <200	<1200 <500	<200 <200
08...	<200	<1300	<200	<400 <200	<1800 <400	<200 <200
08...	<180	<1100	<180	<350 <180	<1100 <350	<180 <180
<b>APR 1987</b>						
15...	<350	<350	<350	<700 <350	<350 <350	<350 <350
15...	<380	<380	<380	<770 <380	<380 <380	<380 <380
15...	<200	<200	<200	<400 <200	<400 <200	<200 <200
JUL						
04...	<200	<200	<200	<400 <200	<200 <200	<200 <200
04...	<210	<200	<200	<400 <200	<210 <200	<210 <200
04...	<200	<200	<200	<400 <200	<200 <200	<200 <200
JUL						
08...	<200	<200	<230	<500 <230	<200 <900	<200 <200
08...	<200	<200	<200	<400 <200	<200 <900	<200 <200
08...	<180	<180	<180	<350 <180	<180 <180	<180 <180
<b>APR 1987</b>						
15...	<350	<350	<350	<700 <350	<350 <350	<350 <350
15...	<380	<380	<380	<770 <380	<380 <380	<380 <380
15...	<200	<200	<200	<400 <200	<200 <200	<200 <200
JUL						
04...	<200	<200	<200	<400 <200	<200 <200	<200 <200
04...	<210	<200	<200	<400 <200	<210 <200	<210 <200
04...	<200	<200	<200	<400 <200	<200 <200	<200 <200
JUL						
08...	<200	<200	<230	<500 <230	<200 <900	<200 <200
08...	<200	<200	<200	<400 <200	<200 <900	<200 <200
08...	<180	<180	<180	<350 <180	<180 <180	<180 <180

4-	4-	4,	4,6-	DINITRO	PHENOL	PENTA-	DI-N-	HEXA-			
BROMO-	CHLORO-	CHLORO-	-ORTHO-	(C6H-	CHLORO-	BUTYL	BUTYL	CHLORO-			
PHENYL	PHENYL	PHENYL	-NITRO-	5OH)	PHENOL	PHTHAL-	PHTHAL-	BENZENE			
PHENYL	ETHER	PHENOL	CRESOL			ATE	ATE	TOT.			
	BOT. MAT	BOT. MAT	BOT. MAT		BOT. MAT	BOT. MAT	BOT. MAT	BENZI-			
DATE	(UG/KG)	(UG/KG)	(UG/KG)		(UG/KG)	(UG/KG)	(UG/KG)	DINE			
								BOT. MAT			
								(UG/KG)			
APR 1987	<350	<350	<2100	<2100	<350	<2100	9100	<350	19000	11000	
15...	<380	<380	<2300	<2300	<380	<2300	10000	<380	33000	12000	
15...	7200	11000	<1200	<1200	<200	<1200	<200	<200	<200	16300	
JUL	<200	<200	<1200	<1200	<200	<1200	<200	<200	<200	13000	
04...	<210	<210	<1300	<1300	<200	<1300	11000	<210	<2200	18000	
04...	6800	10000	<1100	<1100	<200	<1100	<200	<200	<1800	36000	
JUL	<200	12000	<1400	<1400	4300	<1400	<200	<200	<2300	43000	
08...	<200	23000	<1300	<1300	4100	<1300	<200	<200	<2200	53000	
08...	9300	<1100	<1100	<1100	3300	<1100	<180	<180	<1800	24000	

TABLE 14.--CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER  
COLLECTED FROM THE BAYOU D'INDE AREA, LOUISIANA, SEPTEMBER 1987

301244093171300 - INDUSTRIAL OUTFALL ABOVE I-210 BRIDGE NEAR MAPLEWOOD, LOUISIANA

		CARBON-CHLORO-						METHYL-CHLORIDE					
DATE	TIME	SAM-PLING DEPTH (FEET)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-RIDE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	DI-CHLORO-ENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)		
SEP 1987	0800	1.6	<0.2	73	0.2	<0.2	6.2	<0.2	120	<0.2			
17...:	0801	3.0	<0.2	74	0.3	<0.2	6.0	<0.2	120	<0.2			
17...:													
DATE	TIME	SAM-PLING DEPTH (FEET)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-RIDE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	DI-CHLORO-ENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)		
SEP 1987	17...:	<0.2	1.6	<0.2	<0.2	<0.2	1.4	<0.2	7.1	<0.2			
17...:													
DATE	TIME	SAM-PLING DEPTH (FEET)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-RIDE TOTAL (UG/L)	BROMIDE TOTAL (UG/L)	CHLORO-RIDE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)			
SEP 1987	17...:	<0.2	1.5	<0.2	<0.2	<0.2	1.3	<0.2	8.0	<0.2			
17...:													
DATE	TIME	SAM-PLING DEPTH (FEET)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-RIDE TOTAL (UG/L)	VINYL CHLORIDE TOTAL (UG/L)	XYLENE TOTAL (UG/L)	XYLENE TOTAL (UG/L)	XYLENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)		
SEP 1987	17...:	<0.2	5.4	<0.2	<0.2	<0.2	0.7	0.4	2.4	2.6	2.6		
17...:													
DATE	TIME	SAM-PLING DEPTH (FEET)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-RIDE TOTAL (UG/L)	PROPANE TOTAL (UG/L)	PROPENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ETHANE TOTAL (UG/L)	ETHANE TOTAL (UG/L)		
SEP 1987	17...:	5.8	<0.2	5.8	<0.2	<0.2	<0.2	0.6	0.5	1.2	1.2		
17...:													
DATE	TIME	SAM-PLING DEPTH (FEET)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-RIDE TOTAL (UG/L)	PROpane TOTAL (UG/L)	PROPENE TOTAL (UG/L)	benzene TOTAL (UG/L)	benzene TOTAL (UG/L)	ethane TOTAL (UG/L)	ethane TOTAL (UG/L)		
SEP 1987	17...:	6.3	<0.2	60	<0.2	<0.2	<0.2	<0.2	<0.2	1.8	1.8		
17...:													
301234093173600 - INDUSTRIAL OUTFALL AT LOCKPORT MARSH BRIDGE													
DATE	TIME	SAM-PLING DEPTH (FEET)	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-RIDE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	DI-CHLORO-ENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)		
SEP 1987	17...:	0947	1.6	<0.2	65	0.3	<0.2	5.4	<0.2	88	<0.2		
17...:													

CIS	DI-CHLORO-DI-FLUOROMETHANE	DI-CHLORO-DI-FLUOROMETHANE	METHYL-BROMIDE	METHYL-ENE	TETRA-CHLORO-ETHYLENE	TOLUENE
DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
SEP 1987 17... 17...	<0.2 <1.0	1.2 1.0	<0.2 <1.0	<0.2 <1.0	1.3 1.0	<0.2 <1.0
DATE	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	VINYL-CHLO-RIDE TOTAL (UG/L)	XYLENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)
SEP 1987 17... 17...	<0.2 <1.0	5.7 5.0	<0.2 <1.0	<0.2 <1.0	1.1 1.0	<0.2 <1.0
DATE	1,1,2,2-TETRA-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-BENZENE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	1,2-TRANSDI-CHLORO-ETHENE TOTAL (UG/L)
SEP 1987 17... 17...	6.5 4.4	<0.2 <1.0	47 36	<0.2 <1.0	<0.2 <1.0	<0.2 <1.0
301230093180300 - BAYOU D'INDE AT CONFLUENCE WITH INDUSTRIAL OUTFALL						
SAMPLING DEPTH (FEET)	TIME	BENZENE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-RIDE TOTAL (UG/L)	CHLORO-METHANE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)
DATE	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
SEP 1987 17... 17...	1040 1041	1.6 5.9	<1.0 <1.0	68 52	<1.0 <1.0	<1.0 <1.0
DATE	CIS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	DI-CHLORO-DI-FLUOROMETHANE TOTAL (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	STYRENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)
SEP 1987 17... 17...	<1.0 <1.0	1.0 1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0	<1.0 <1.0

TABLE 14.--CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER  
COLLECTED FROM THE BAYOU D'INDE AREA, LOUISIANA, SEPTEMBER 1987--CONTINUED

		2-		CHLORO-		1,2-	
		CHLORO-		ETHYL-		TRANS DI-	
		VINYL-		ETHER		CHLORO-	
		ETHER		BENZENE		BENZENE	
		1,4-DI-	CHLORO-	1,3-DI-	CHLORO-	1,4-DI-	CHLORO-
		CHLORO-	CHLORO-	CHLORO-	PROPENE	CHLORO-	CHLORO-
		ETHANE	ETHANE	BENZENE	TOTAL	BENZENE	BENZENE
		TOTAL	TOTAL	TOTAL	(UG/L)	TOTAL	TOTAL
		(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
DATE							
SEP 1987							
17...	17...	5.5	<1.0	4.2	<1.0	<1.0	<1.0
		4.7	<1.0	37	<1.0	<1.0	<1.0

301210093173900 - BAYOU D'INDE 0.5 MILE ABOVE MOUTH

	DATE	1,1,2,2-TETRA-CHLORO-Ethane	1,2-DI-CHLORO-BENZENE	1,2-DI-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	1,3-DI-CHLORO-BENZENE	1,3-DI-CHLORO-BENZENE	1,4-DI-CHLORO-BENZENE	1,4-DI-CHLORO-BENZENE	2-CHLORO-ETHYL-VINYL-ETHER
	DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
SEP 1987										
17..		3.9	<1.0	35	<1.0	<1.0	<1.0	<1.0	1.6	<1.0
17..		1.1	<0.2	12	<0.2	<0.2	<0.2	<0.2	0.8	<0.2

301153093171900 - BAYOU D'INDE AT MOUTH NEAR SULPHUR, LOUISIANA

TABLE 14.--CONCENTRATIONS OF VOLATILE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER  
COLLECTED FROM THE BAYOU D'INDE AREA, LOUISIANA, SEPTEMBER 1987--CONTINUED

		2-			1,2-		
		CHLORO-	ETHYL-	VINYL-	CHLORO-	CHLORO-	1,4-DI-
		ETHER			BENZENE	PROPENE	DI-CHLORO-
DATE	TIME	1,1,2,2 TETRA- CHLORO- ETHANE	1,2-DI- CHLORO- BENZENE	1,2-DI- CHLORO- ETHANE	1,3-DI- CHLORO- PROPANE	1,3-DI- CHLORO- BENZENE	DI-CHLORO-
	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
SEP 1987							
17...	1.6	<1.0	16	<1.0	<1.0	<1.0	<1.0
17...	0.4	<0.2	4.1	<0.2	<0.2	<0.2	<0.2
17...	2.2	<1.0	23	<1.0	<1.0	<1.0	<1.0
17...	<1.0	<1.0	9.0	<1.0	<1.0	<1.0	<1.0
17...	0.2	<0.2	3.0	<0.2	<0.2	<0.2	<0.2

301150093171600 - CALCASIEU RIVER AT BAYOU D'INDE 2.8 MILES SOUTHEAST OF HOLLYWOOD, LOUISIANA

DATE	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	TRI- CHLORO- FLUORO- ETHYLENE TOTAL (UG/L)	VINYL CHLORIDE TOTAL (UG/L)	XYLENE WATER WHOLE TOTAL (UG/L)	1,1-DI-		1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	
					TOT REC (UG/L)	TOT (UG/L)	CHLORO- ETHANE TOTAL (UG/L)	CHLORO- ETHANE TOTAL (UG/L)
SEP 1987	17...<1.0 17...<1.0 17...<1.0	17...<1.0 17...<1.0 17...<1.0	2.7 1.2 1.8	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0
			1,1,2,2	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L)	1,2- CHLORO- ETHYL- VINYLN- ETHER TOTAL (UG/L)
SEP 1987	17...<1.0 17...<1.0 17...<1.0	17...<1.0 17...<1.0 17...<1.0	1.9 1.0 1.2	<1.0 <1.0 <1.0	19 8.0 12	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0	<1.0 <1.0 <1.0
IN SITU WATER-QUALITY MEASUREMENTS, SEPTEMBER 17, 1987								
SITE NAME, TIME		DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	COND (US/CM)	SAL (PPT)	ORP (MV)
INDUSTRIAL OUTFALL ABOVE I-210 BRIDGE 0800		1.6 3.0	38.0 38.1	6.6 6.5	3.9 3.8	22.100 22.200	13.0 13.1	+203 +197
INDUSTRIAL OUTFALL AT LOCKPORT MARSH BRIDGE 0945		1.6 8.6	37.4 35.9	6.7 6.8	3.6 3.3	21.100 20.800	12.4 12.2	+183 +181
INDUSTRIAL OUTFALL AT CONFLUENCE WITH BAYOU D'INDE 1040		1.6 5.9	36.1 36.1	6.6 6.7	3.9 4.3	20.800 20.800	12.2 12.2	+188 +192
BAYOU D'INDE 0.5 MILE ABOVE MOUTH 1140		1.6 11.6	34.0 29.3	6.9 7.3	4.1 2.8	19.900 20.800	11.7 12.2	+175 +134
BAYOU D'INDE AT MOUTH 1350		1.6 8.2	31.8 28.9	7.3 7.4	5.8 2.6	20.000 22.600	11.7 13.5	+137 +132
BAYOU D'INDE AT MOUTH 1645		1.6 5.9 8.9	31.8 29.4 29.0	7.8 7.5 7.3	7.3 3.5 1.9	19.500 21.200 23.700	11.3 12.4 14.2	+102 +111 +114
CALCASIEU RIVER AT BAYOU D'INDE 1720		1.6 11.2 25.1	31.9 29.1 29.1	7.7 7.4 7.5	6.4 3.7 0.1	19.600 20.700 33.100	11.5 12.1 20.9	+068 +041 -013

TABLE 15.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN WATER, BOTTOM MATERIAL, AND TISSUE AND PHYSICAL DATA COLLECTED FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JULY-SEPTEMBER 1987

301404093144800 - CALCASIEU RIVER AT BUOY 130 AT LAKE CHARLES, LOUISIANA

DATE	TIME	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)	CARBON-TETRA-CHLOR-CHLO-RIDE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ACE-NAPHTH-YLENE TOTAL (UG/L)	ACE-NAPHTH-ENE TOTAL (UG/L)
JUL 1987 21...	AUG 25...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5
JUL 1987 21...	AUG 25...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	1.0	0.5	<400 <5
DATE	TIME	BOT.MAT (UG/KG)	ANTHRA-CENE TOTAL (UG/L)	BENZO B FLUOR-AN-THENE TOTAL (UG/L)	BENZO K FLUOR-AN-THENE TOTAL (UG/KG)	BENZO -A- PYRENE TOTAL (UG/L)	BENZO -A- PYRENE TOTAL (UG/KG)	BIS-CHLORO-ETHYL ETHER TOTAL (UG/L)	BIS-CHLORO-ETHYL ETHER TOTAL (UG/KG)	BIS-(2-CHLORO-EPOXY) METHANE TOTAL (UG/L)
JUL 1987 21...	AUG 25...	<370 <400	<5 <400	<10 <400	<740 <800	<10 <800	<10 <800	<740 <800	<5 <400	<370 <400 <5
DATE	TIME	BOT.MAT (UG/KG)	BIS (2-CHLORO-ISO-ETHOXY) PROPYL TOTAL (UG/L)	BIS (2-CHLORO-ISO-ETHOXY) PROPYL TOTAL (UG/KG)	N-BUTYL BENZYL PHTHAL-ATE TOTAL (UG/L)	CHLORO-BENZENE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	CHRY-SENE TOTAL (UG/KG)	CHRY-SENE TOTAL (UG/L)	DIETHYL-PHTHAL-ATE TOTAL (UG/KG)
JUL 1987 21...	AUG 25...	<370 <400	<5 <400	<5 <400	<370 <400	<0.2 <0.2	<0.2 <0.2	<10 <800	<5 <400	<370 <400 <5
DATE	TIME	BOT.MAT (UG/KG)	DI-METHYL-PHTHAL-ATE TOTAL (UG/L)	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/KG)	FLUOR-ENE TOTAL (UG/L)	BOT.MAT (UG/KG)	HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	INDENO-(1,2,3-CD) PYRENE TOTAL (UG/L)
JUL 1987 21...	AUG 25...	<370 <400	<5 <400	<370 <400	<5 <400	<370 <400	<5 <400	<370 <400	<5 <400	<370 <400 <10 <10

				NITRO-	NITRO-	N-NITRO-	N-NITRO-	N-NITRO-
				SODI-M-	SODI-N-	-SODI-	-SODI-	-SODI-
				CHLORO-	PROPYL-	PHENY-	METHY-	METHY-
				BENZENE	AMINE	LAMINE	LAMINE	LAMINE
				TOTAL (UG/L)	TOTAL (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)
INDENO (1,2,3- CD)	ISO- PHORONE	METHYL- BROMIDE	ISO- PHORONE	METHYL- ENE	SODI-M-	-SODI-	-SODI-	-SODI-
DATE	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	CHLORO- RIDE	PROPYL-	PHENY-	METHY-	METHY-
JUL 1987 21... AUG 25...	<740 <800	<5 <5	<0.2 <0.2	TOTAL (UG/L)	AMINE	LAMINE	LAMINE	LAMINE
				BOT.MAT (UG/L)	TOTAL (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)
NAPHTH- ALENE	NITRO- BENZENE	NITRO- BENZENE	PHENAN-	PHENAN-	PHENAN-	PHENYNE	PHENYNE	PHENYNE
DATE	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	CHLORO- META	CHLORO- CRESOL	THRENE	THRENE	THRENE
JUL 1987 21... AUG 25...	<370 <400	<5 <5	<370 <400	CHLORO- META	CRESOL	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHYL	1,1,1- TRI- CHLORO- ETHANE	1,1,2- TETRA- CHLORO- ETHANE	1,1,2,2- PERYL	1,1,2,2- PERYL	ANTHRAC	ANTHRAC	ANTHRAC
DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TETRA- CHLORO- ETHANE	TETRA- CHLORO- ETHANE	ENE1,1,2	ENE1,1,2	ENE1,1,2
JUL 1987 21... AUG 25...	<0.2 <0.2 <0.2	<0.2 <0.2 <0.2	<0.2 <0.2 <0.2	ETHANE	ETHANE	-BENZOP	-BENZANT	-BENZANT
				TOTAL (UG/L)	TOTAL (UG/L)	ERYLENE	ERYLENE	ERYLENE
						TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
						BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
1,2-DI- CHLORO- PROPANE	1,2- TRANSIDI	1,2,4- CHLORO- BENZENE	1,2,4- CHLORO- BENZENE	1,2,5,6	1,2,5,6	1,3-DI- CHLORO-	1,3-DI- CHLORO-	1,4-DI- CHLORO-
DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	-DIBENZ	-DIBENZ	-ANTHRA	-ANTHRA	-ANTHRA
JUL 1987 21... AUG 25...	<0.2 <0.2 <0.2	<0.2 <0.2 <0.2	<0.2 <0.2 <0.2	-BENZENE	-BENZENE	-CENE	-CENE	-CENE
				TOTAL (UG/L)	TOTAL (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)

TABLE 15.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN WATER, BOTTOM MATERIAL, AND TISSUE AND PHYSICAL DATA COLLECTED FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JULY-SEPTEMBER 1987--CONTINUED

301234093174900 - INDUSTRIAL OUTFALL CANAL AT BRIDGE 0.25 MILE ABOVE MOUTH

TABLE 15.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN WATER, BOTTOM MATERIAL, AND TISSUE AND PHYSICAL DATA COLLECTED FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JULY-SEPTEMBER 1987--CONTINUED

				NITRO-	NITRO-	N-NITRO-	N-NITRO-	N-NITRO-	N-NITRO-
				SODI-N-	-SODI-	-SODI-	-SODI-	-SODI-	-SODI-
				PROPYL-	PHENYL-	PHENYL-	PHENYL-	PHENYL-	METHYL-
				AMINE	LAMINE	LAMINE	LAMINE	LAMINE	LAMINE
				TOTAL	BOT.MAT	TOTAL	BOT.MAT	TOTAL	BOT.MAT
				(UG/L)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/KG)
INDENO (1,2,3- CD)	ISO- PYRENE	METHYL- BROMIDE	ISO- PHORONE	METHYL- CHLO- RIDE	AMINE	LAMINE	LAMINE	LAMINE	LAMINE
DATE	BOT.MAT (UG/KG)	TOTAL (UG/L)	TOTAL (UG/KG)	TOTAL (UG/L)	TOTAL (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)
JUL 1987 21... AUG 25...	22000 <5 <600	<5 <0.2 <500	<0.2 <200 <300	1.2 <200 <0.2	<5 <200 <300	<5 <200 <300	<5 <200 <300	<5 <200 <300	<5 <200 <300
NAPHTH- ALENE	NITRO- BENZENE	NITRO- BENZENE	PARA- CHLORO- META	PHENAN- THRENE	PHENAN- THRENE	PHENAN- THRENE	PHENAN- THRENE	PHENAN- THRENE	PHENAN- THRENE
DATE	BOT.MAT (UG/KG)	TOTAL (UG/L)	CRESOL	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)
JUL 1987 21... AUG 25...	6800 <5 <300	<200 <300 <300	<30 <1000 <1800	<5 <18000 <300	<5 <18000 <300	<5 <18000 <300	<5 <18000 <300	<5 <18000 <300	<5 <18000 <300
1,1-DI- CHLORO- ETHANE	1,1-DI- CHLORO- ETHANE	1,1,1- TRI- CHLORO- ETHANE	1,1,2- TRI- CHLORO- ETHANE	1,1,2,2- TETRA- CHLORO- ETHANE	1,1,2,2- TETRA- CHLORO- ETHANE	1,1,2,2- TETRA- CHLORO- ETHANE	1,1,2,2- TETRA- CHLORO- ETHANE	1,1,2,2- TETRA- CHLORO- ETHANE	1,1,2,2- TETRA- CHLORO- ETHANE
DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
JUL 1987 21... AUG 25...	0.7 1.1 1.1	<0.2 1.6 1.6	3.1 5.1 5.1	7.5 12 12	2.5 <0.2 <0.2	<10 <10 <10	20000 <600 <600	<5 <5 <5	4100 <300 <300
1,2-DI- CHLORO- PROPANE	1,2- TRANSDI- CHLORO- ETHENE	1,2- TRI- CHLORO- BENZENE	1,2,4- TRI- CHLORO- BENZENE	1,2,4- TRI- CHLORO- BENZENE	1,2,5,6 -DIBENZ -ANTHRA	1,2,5,6 -DIBENZ -CENE	1,2,5,6 -DIBENZ -CENE	1,3-DI- CHLORO- BENZENE	1,3-DI- CHLORO- BENZENE
DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)
JUL 1987 21... AUG 25...	<0.2 2.0 <0.2	<5 <5 <5	6700 19000 19000	<10 <10 <10	<10 <600 <600	<300 <0.2 <0.2	<300 <0.2 <0.2	<200 <300 <300	<200 <0.2 <0.2

2-									DI-N-OCTYL-PHTHALATE									2,4-DI-CHLOROPHENOL PHENOL TOTAL BOT.MAT (UG/KG) (UG/L)									
CHLORO-ETHYL-VINYL-ETHER									CHLORO-NAPHTHALENE									NITRO-PHENOL TOTAL BOT.MAT (UG/KG) (UG/L)									
DATE			TOTAL			BOT.MAT (UG/KG)			TOTAL			BOT.MAT (UG/KG)			TOTAL			ATE			PHENOL TOTAL BOT.MAT (UG/KG) (UG/L)			PHENOL TOTAL BOT.MAT (UG/KG) (UG/L)			
JUL 1987 21...	<0.2	AUG 25...	<5	<200	<5	<200	<5	<200	<5	<200	<5	<300	<5	<300	<5	<10	<10	<10	<10	<10	<10	<300	<5	<200	<300	<5	
2,4-DI-METHYL-PHENOL									2,4-DI-NITRO-TOLUENE									2,4,6-TRI-CHLOROPHENOL									
DATE	TOTAL			BOT.MAT (UG/L)			TOTAL			BOT.MAT (UG/KG)			TOTAL			BOT.MAT (UG/L)			TRI-CHLOROPHENOL			2,6-DI-NITROTOLUENE			BROMOPHENYL		
JUL 1987 21...	<5	AUG 25...	<5	<300	<5	<300	<5	<300	<5	<200	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<300	<5	<200	<300	<5	
4-BROMOPHENYL-PHENYL-ETHER									4-NITRO-PHENOL									4,6-DINITRO-CRESOL									
DATE	BOT.MAT (UG/KG)			TOTAL			BOT.MAT (UG/L)			TOTAL			BOT.MAT (UG/KG)			TOTAL			DINITRO-METHANE			(C6H-5OH)			PHENOL (UG/L)		
JUL 1987 21...	6400	AUG 25...	<5	<30	<30	<1000	<30	<1000	<30	<1000	<30	<1000	<30	<1000	<30	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<200	<5	<300	<5	<30	
BIS(2-ETHYLHEXYL)PHTHALATE									DI-N-BUTYL-PHTHALATE									TRI-CHLORO-CHLOROPHENOL									
DATE	BOT.MAT (UG/KG)			TOTAL			BOT.MAT (UG/L)			TOTAL			BOT.MAT (UG/KG)			TOTAL			CHLOROPHENOL			BENZENE (UG/L)			BENZENE (UG/L)		
JUL 1987 21...	<1000	AUG 25...	<5	<9000	<5	<200	<5	<200	<5	<200	<5	<300	<5	<300	<5	1.0	5.3	5.3	5	5	5	37000	8.0	34000	8.0	37000	

TABLE 15.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN WATER, BOTTOM MATERIAL, AND TISSUE AND PHYSICAL DATA COLLECTED FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JULY-SEPTEMBER 1987--CONTINUED

301153093171900 - BAYOU D'INDE AT MOUTH NEAR SULPHUR, LOUISIANA

DATE	TIME	CARBON-CHLORO-BROMO-METHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ACE-NAPHTH-YLENE TOTAL (UG/L)	ACE-NAPHTH-YLENE BOT.MAT (UG/KG)	ACE-NAPHTH-YLENE TOTAL (UG/L)	ACE-NAPHTH-YLENE BOT.MAT (UG/KG)	DI-METHYL-PHTHALATE (UG/L)	
JUL 1987 21... SEP 01...	1230	5.1	<0.2	10	4.1	16	22	<0.2	<0.2	<5	<300	<5	<5	
JUL 1987 21... SEP 01...	1430	2.5	<0.2	20	160	12	17	<0.2	<0.2	<5	<36	<5	<5	
				BENZO B	BENZO K	BENZO K	BENZO-	BENZO-	BIS-2-	BIS-(2-				
				BENZO FLUOR-AN-	FLUOR-AN-	FLUOR-AN-	A-	CHLORO-ETHYL	CHLORO-ETHYL	CHLORO-ETHYL				
				CENE CENE	THENE THENE	THENE THENE	PYRENE	ETHER	ETHER	ETHER				
				TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/KG)				
JUL 1987 21... SEP 01...	<300	<5	<300	<10	<300	<10	<600	<10	<600	<5	<300	<5	<5	
				<36	<36	<10	<71	<10	<71	<5	<36	<5	<5	
				BIS (2-CHLORO-ISO-PROPYL)	N-BUTYL BENZYL	N-BUTYL BENZYL	CHLORO-BENZENE	CHLORO-Ethane	CHRY-SENE	CHRY-SENE	DIETHYL PHTHALATE (UG/L)	DIETHYL PHTHALATE (UG/L)	DI- METHYL PHTHALATE (UG/L)	
				METHANE ETHER	ETHER	PHTHALATE	ATE	TOTAL (UG/KG)	TOTAL (UG/L)	TOTAL (UG/KG)				
				TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)							
JUL 1987 21... SEP 01...	<300	<5	<300	<5	<300	<5	<300	<0.2	<0.2	<10	<600	<5	<300	
				<36	<5	<5	<36	<0.2	<0.2	<10	<71	<5	<36	
				DI-METHYL-PHTHALATE (UG/KG)	ETYL-BENZENE TOTAL (UG/L)	FLUOR-ANTHENE TOTAL (UG/KG)	FLUOR-ENE TOTAL (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)		
JUL 1987 21... SEP 01...	<300	<0.2	<5	<300	<5	<300	<5	<300	<5	<300	<5	<36	<5	<10

INDENO (1,2,3- CD)		METHYL- BROMIDE	ISO- PHORONE	METHYL- BROMINE	ISO- PHORONE	METHYL- CHLO- RIDE	METHYL- ENE	N- NITRO- SODI-N- PROPYL-	N- NITRO- SODI-	N- NITRO-
DATE	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/L)	TOTAL (UG/KG)	BOT.MAT (UG/L)	TOTAL (UG/L)	BOT.MAT (UG/L)	PHENY- AMINE	-SODI- PHENY-	-SODI-
JUL 1987 21...	<600	<5	<0.2	<300	<0.2	<5	<300	LAMINE	METHY-	METHY-
SEP 01...	<71	<5	<0.2	<36	<0.2	<5	<36	TOTAL	BOT.MAT	BOT.MAT
NAPHTH- ALENE		NITRO- BENZENE	NITRO- BENZENE	META	PHENAN- THRENE	META	PHENAN- THRENE	PYRENE	ENE	TRI- CHLORO-
DATE	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/L)	TOTAL (UG/KG)	CRESOL	CRESOL	BOT.MAT (UG/L)	TOTAL	BOT.MAT (UG/L)	FLUORO-
JUL 1987 21...	<300	<5	<300	<30	<1800	<5	<300	<5	<300	METHANE
SEP 01...	<36	<5	<36	<30	<210	<5	<36	<5	<36	TOTAL
1,1-DI- CHLORO- ETHYL- ETHANE		1,1,1- TRI- CHLORO- ETHANE	1,1,1- TRI- CHLORO- ETHANE	1,1,2- TETRA- CHLORO- ETHANE	1,1,2- TETRA- CHLORO- ETHANE	1,1,2- TETRA- CHLORO- ETHANE	1,1,2- TETRA- CHLORO- ETHANE	BENZOGH	BENZO A	1,2-DI- CHLORO-
DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	PERYL	ANTHRAC	CHLORO-
JUL 1987 21...	<0.2	0.3	1.7	2.9	<0.2	<10	<600	1 PERYL	ANTHRAC	BENZENE
SEP 01...	1.3	0.5	2.6	6.0	<0.2	<10	<71	ENE1,12	ENE1,12	BENZENE
1,2-DI- CHLORO- PROPANE		1,2,4- TRANS DI	1,2,4- CHLORO- ETHENE	1,2,4- CHLORO- BENZENE	1,2,5,6 -DIBENZ -ANTHRA	1,2,5,6 -DIBENZ -ANTHRA	1,2,5,6 -DIBENZ -ANTHRA	CHLORO-	CHLORO-	1,4-DI- CHLORO-
DATE	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	PROPENE	BENZENE	BENZENE
JUL 1987 21...	<0.2	0.5	<5	<300	<10	<600	<0.2	TOTAL	TOTAL	TOTAL
SEP 01...	<0.2	<0.2	<5	<36	<10	<71	<0.2	BOT.MAT	BOT.MAT	BOT.MAT

TABLE 15.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN WATER, BOTTOM MATERIAL, AND TISSUE AND PHYSICAL DATA COLLECTED FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JULY-SEPTEMBER 1987--CONTINUED

2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)		2-CHLORO-NAPHTHALENE TOTAL (UG/L)		2-CHLOROPHENOL BOT. MAT (UG/KG)		2-CHLOROPHENOL BOT. MAT (UG/L)		2-NITROPHENOL BOT. MAT (UG/KG)		2-NITROPHENOL BOT. MAT (UG/L)		DI-N-OCTYL PHTHALATE BOT. MAT (UG/KG)		2,4-DI-CHLOROPHENOL TOTAL (UG/L)
DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
JUL 1987 21... SEP 01...	<0.2	<5	<300	<5	<300	<5	<300	<5	<300	<10	<600	<5	<300	2,4-DI-CHLOROPHENOL TOTAL (UG/L)
JUL 1987 21... SEP 01...	<0.2	<5	<36	<5	<36	<5	<36	<5	<36	<10	<71	<5	<36	2,4-DI-CHLOROPHENOL TOTAL (UG/L)
JUL 1987 21... SEP 01...	2,4-DI-METHYL-INDIN PHENOL TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)
JUL 1987 21... SEP 01...	<5	<300	<5	<300	<5	<300	<5	<300	<5	<300	<5	<300	<5	<300
JUL 1987 21... SEP 01...	4-BROMOPHENYL-PHENYL ETHER TOTAL (UG/L)	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	DI-N-BUTYL-PHTHALATE TOTAL (UG/L)	VINYLCHLORIDE TOTAL (UG/L)	TRICHLORO-ETHYLENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	PENTA-CHLOROPHENOL TOTAL (UG/L)	4-BROMOPHENYL-PHENYL ETHER TOTAL (UG/L)	4-BROMOPHENYL-PHENYL ETHER TOTAL (UG/L)	4-BROMOPHENYL-PHENYL ETHER TOTAL (UG/L)	4-BROMOPHENYL-PHENYL ETHER TOTAL (UG/L)	4-BROMOPHENYL-PHENYL ETHER TOTAL (UG/L)	4-BROMOPHENYL-PHENYL ETHER TOTAL (UG/L)	4-BROMOPHENYL-PHENYL ETHER TOTAL (UG/L)
JUL 1987 21... SEP 01...	<300	<5	<30	<1800	<30	<1800	<0.2	<210	<0.2	<210	<0.2	<300	<5	<300
JUL 1987 21... SEP 01...	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	DIBUTYL-PHTHALATE TOTAL (UG/L)	DI-N-BUTYL-PHTHALATE TOTAL (UG/L)	VINYLCHLORIDE TOTAL (UG/L)	TRICHLORO-ETHYLENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	PENTA-CHLOROPHENOL TOTAL (UG/L)	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)
JUL 1987 21... SEP 01...	<1800	<5	16000	<5	340	<5	<300	<0.2	<36	0.4	3.8	<5	16000	<5
JUL 1987 21... SEP 01...	<210	<5	16000	<5	340	<5	<300	<0.2	<36	0.4	3.8	<5	15000	<5

08017020 - CALCASIEU RIVER AT BURTON LANDING NEAR LAKE CHARLES, LOUISIANA

DATE	CARBON- CHLORO- BROMO- METHANE	TETRA- CHLORO- RIDE	1,2-DI- CHLORO- ETHANE	BROMO- FORM	BROMO- METHANE	CHLORO- FORM	DI- BROMO- METHANE	TOLUENE	BENZENE	ACE- NAPHTH- ENE	ACE- NAPHTH- ENE
DATE	TIME	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
JUL 1987 21...	1300	<0.2	<0.2	0.8	<0.2	<0.2	1.7	<0.2	<0.2	<270	<5
AUG 25...	1230	<0.2	<0.2	3.5	3.5	<0.2	1.9	<0.2	<0.2	<370	<5
DATE	ANTHEA- CENE	ANTHEA- CENE	BENZO B FLUOR- AN- THENE	BENZO K FLUOR- AN- THENE	BENZO K FLUOR- AN- THENE	BENZO- A- PYRENE	BENZO- A- PYRENE	CHLORO- ETHYL	CHLORO- ETHYL	BIS (2- ETHOXY)	BIS (2- CHLORO- METHANE)
DATE	BOT. MAT (UG/KG)	TOTAL (UG/L)	BOT. MAT (UG/KG)	TOTAL (UG/L)	BOT. MAT (UG/KG)	TOTAL (UG/L)	BOT. MAT (UG/KG)	TOTAL (UG/L)	BOT. MAT (UG/L)	TOTAL (UG/KG)	TOTAL (UG/L)
JUL 1987 21...	<270	<5	<270	<10	<540	<10	<540	<10	<540	<5	<270 <5
AUG 25...	<370	<5	<370	<10	<740	<10	<740	<10	<740	<5	<370 <5
DATE	BIS (2- CHLORO- ISO- PROPYL)	BIS (2- CHLORO- ISO- PROPYL)	N-BUTYL BENZYL PROPYL	PHTHAL- ATE	CHLORO- BENZENE	CHLORO- ETHANE	CHRY- SENE	CHRY- SENE	DIETHYL PHTHAL- ATE	DIETHYL PHTHAL- ATE	DI- METHYL PHTHAL- ATE
DATE	BOT. MAT (UG/KG)	TOTAL (UG/L)	BOT. MAT (UG/KG)	TOTAL (UG/L)	BOT. MAT (UG/KG)	TOTAL (UG/L)	BOT. MAT (UG/L)	TOTAL (UG/KG)	BOT. MAT (UG/L)	TOTAL (UG/KG)	TOTAL (UG/L)
JUL 1987 21...	<270	<5	<270	<5	<270	<0.2	<0.2	<10	<540	<5	<270 <5
AUG 25...	<370	<5	<370	<5	<370	<0.2	<0.2	<10	<740	<5	<370 <5
DATE	DI- METHYL PHTHAL- ATE	DI- METHYL PHTHAL- ATE	FLUOR- ANTHENE	FLUOR- ENE	FLUOR- ENE	PENT- ADIENE	PENT- ADIENE	CHLORO- ETHANE	CHLORO- ETHANE	INDENO (1,2,3- CD) PYRENE	INDENO (1,2,3- CD) PYRENE
DATE	BOT. MAT (UG/KG)	TOTAL (UG/L)	BOT. MAT (UG/KG)	TOTAL (UG/L)	BOT. MAT (UG/KG)	TOTAL (UG/L)	BOT. MAT (UG/L)	TOTAL (UG/KG)	BOT. MAT (UG/L)	TOTAL (UG/KG)	TOTAL (UG/L)
JUL 1987 21...	<270	<0.2	<5	<270	<5	<270	<5	<270	<5	<270	<10
AUG 25...	<370	<0.2	<5	<370	<5	<370	<5	<370	<5	<370	<10

TABLE 15.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN WATER, BOTTOM MATERIAL, AND TISSUE AND PHYSICAL DATA COLLECTED FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JULY-SEPTEMBER 1987--CONTINUED

DATE	BOT. MAT (UG/KG)	NITRO-CHLORO-COMPOUNDS				N-NITRO-SODI-PHENYLAMINE				N-NITRO-SODI-METHYLAMINE				N-NITRO-SODI-METHYLAMINE			
		INDENO (1,2,3- CD)	ISO- PHORONE	METHYL- BROMIDE	ISO- PHORONE	CHLO- RIDE	PROPYL- AMINE	LAMINE	LAMINE	SODI- PHENY-	LAMINE	BOT.MAT	TOTAL	BOT.MAT	TOTAL	BOT.MAT	TOTAL
JUL 1987																	
21...	<54.0	<5	<0.2	<270	<0.2	<5	<270	<5	<270	<5	<5	<270	<5	<270	<5	<270	
AUG	<74.0	<5	<0.2	<370	<0.2	<5	<370	<5	<370	<5	<370	<5	<370	<5	<370	<5	
25...																	
DATE	BOT. MAT (UG/KG)	NITRO-BENZENE				PHENAN-THRENE				PYRENE				TETRA-CHLORO-CHLORO-			
		NAPHTH- ALENE	BENZENE	BENZENE	BENZENE	PHENAN- THRENE	PHENAN- THRENE	PHENAN- THRENE	PHENAN- THRENE	PYRENE	PYRENE	PYRENE	PYRENE	ETHYL- ENE	FLUORO- METHANE	CHLORO- METHANE	CHLORO- METHANE
JUL 1987																	
21...	<270	<5	<270	<30	<1600	<5	<5900	<5	<5900	<5	<4800	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
AUG	<370	<5	<370	<30	<2200	<5	<370	<5	<370	<5	<370	0.5	<0.2				
25...																	
DATE	TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL- ETHANE				1,1,2-TRI-CHLORO- ETHANE				1,1,2,2-TETRA- CHLORO-ETHANE				1,2-DI-CHLORO- BENZANT			
		TOTAL	TOTAL	TOTAL	TOTAL	ETHANE	ETHANE	ETHANE	ETHANE	ERYLENE	ERYLENE	ERYLENE	ERYLENE	BENZENE	BENZENE	BENZENE	BENZENE
JUL 1987																	
21...	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<10	<540	<540	<540	<0.2	<0.2	<0.2	<0.2
AUG	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<740	<740	<740	<740	<0.2	<0.2	<0.2	<0.2
25...																	
DATE	TOTAL (UG/L)	1,2-TRANSDI-CHLORO- PROPANE				1,2,4-TRI-CHLORO- BENZENE				1,2,5,6- DIBENZ- ANTHRA- BENZENE				1,3-DI- CHLORO- BENZENE			
		ETHENE	TOTAL	TOTAL	TOTAL	ETHENE	BENZENE	BENZENE	BENZENE	-ANTHRA- CENE	-ANTHRA- CENE	-ANTHRA- CENE	-ANTHRA- CENE	CHLORO- BENZENE	CHLORO- BENZENE	CHLORO- BENZENE	CHLORO- BENZENE
JUL 1987																	
21...	<0.2	<0.2	<5	<270	<5	<540	<540	<540	<540	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
AUG	<0.2	<0.2	<5	<370	<10	<740	<740	<740	<740	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
25...																	



TABLE 15.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE  
ORGANIC COMPOUNDS IN WATER, BOTTOM MATERIAL, AND TISSUE AND PHYSICAL DATA  
COLLECTED FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA,  
JULY-SEPTEMBER 1987--CONTINUED

CONCENTRATIONS OF MANMADE ORGANIC COMPOUNDS IN RANGIA CUNEATA, JULY 21-

SEPTEMBER 1, 1987

[CONCENTRATIONS IN MICROGRAMS PER KILOGRAM, WHOLE TISSUE BASIS]

	RANGIA BED			BAYOU D'INDE AT MOUTH			CALCASIEU RIVER AT BURTON LANDING DUPLICATES		
	DUPLICATES	7/21	8/25	9/01	8/25	8/25	8/25	8/25	8/25
40 CLAMS									
BROMOFORM	ND	ND	ND	350	5	5	5	5	5
CHLOROFORM	5	4	ND	28	8	8	8	8	8
1,2-DICHLOROETHANE	ND	ND	ND	17	ND	ND	ND	ND	ND
1 CLAM									
HEXACHLOROBENZENE	ND	ND	ND	220	20	20	20	20	20
HEXACHLOROBUTADIENE	ND	ND	10	580	15	15	15	15	15
OCTACHLORONAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
OCTACHLOROSTYRENE	ND	ND	ND	20	ND	ND	ND	ND	ND
BENZOPYRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
BENZOPERYLENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	10	10	10	10	10	10
PYRENE	ND	10	ND	10	ND	10	ND	10	ND
CHRYSENE	ND	ND	ND	20	20	20	20	20	20
MOISTURE (PERCENT)	90.4	90.5	89.9	88.3	89.4	89.4	89.4	89.4	89.4
LIPID (PERCENT)	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3

LOWEST LEVEL OF DETECTION FOR BROMOFORM AND 1,2-DICHLOROETHANE = 2  $\mu$ G/KG;  
DUE TO VARIABLE BLANK, ANY CHLOROFORM VALUE BELOW 15  $\mu$ G/KG MAY NOT BE REAL.

LOWEST LEVEL OF DETECTION FOR ALL OTHERS = 10  $\mu$ G/KG.

IN SITU WATER-QUALITY MEASUREMENTS, JULY 21, 1987 - SEPTEMBER 1, 1987.

SITE NAME, TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
JULY 21, 1987							
LAKE CHARLES AT RANGIA BED 1115	1.6 3.3	28.6 28.6	6.6 6.4	4.9 3.8	1,900 2,400	0.5 0.8	+157 +154
INDUSTRIAL OUTFALL 0.25 MILE ABOVE BAYOU D'INDE 1145	1.6 6.9	35.9 36.0	7.3 7.3	4.0 4.1	8,500 8,500	4.4 4.4	+156 +158
BAYOU D'INDE AT MOUTH 1430	1.6 6.3	32.7 31.3	7.0 7.0	4.4 4.3	6,460 6,150	3.1 2.9	+150 +149
CALCASIEU RIVER AT BURTON LANDING 1300	1.6 4.6	29.9 29.6	7.9 7.6	7.1 4.0	8,750 12,600	4.6 6.6	+164 +165
AUGUST 25, 1987							
LAKE CHARLES AT RANGIA BED 1100	1.6	31.0	7.3	5.7	7,720	3.9	+188
INDUSTRIAL OUTFALL 0.25 MILE ABOVE BAYOU D'INDE 1400	1.6 5.6	41.0 41.0	7.5 7.5	5.6 5.4	22,200 22,200	13.2 13.2	+168 +168
CALCASIEU RIVER AT BURTON LANDING 1230	1.6 5.0	32.2 31.7	8.2 8.0	6.6 5.1	23,000 24,500	13.8 14.8	+146 +157
SEPTEMBER 1, 1987							
BAYOU D'INDE AT MOUTH 1430	1.6 3.3	32.2 33.4	7.8 7.3	7.8 4.4	17,500 22,500	10.0 13.3	+163 +174

TABLE 16.--RADON-222 ACTIVITY LEVELS IN WATER AND BOTTOM MATERIAL IN PRIEN LAKE, LOUISIANA, DECEMBER 1987-FEBRUARY 1988

[DISINTEGRATIONS PER MINUTE PER LITER, DPM/L]

RADON-222 ACTIVITY				
DATE	SAMPLING TIME	CLOSED CHAMBER (DPM/L)	OPEN CHAMBER (DPM/L)	TIME (HOURS)
FIRST DEPLOYMENT				
12-23-87	1030	2.1	0.4	0.0
1- 6-88	0930	1.9	19.3	360.0
1-13-88	1115	3.3	12.6	528.8
SECOND DEPLOYMENT				
1-27-88	1400	2.0	2.3	0.0
1-29-88	1000	1.6	26.8	44.0
2- 1-88	1130	4.0	29.3	117.5
2- 9-88	1500	1.4	19.3	313.0

IN SITU RADON-222 SEDIMENT-WATER FLUX AND CALCULATED APPARENT  
SEDIMENT DIFFUSIVITIES

[DASHES (---), CORE NOT COLLECTED]

DATE	TIME (HOURS)	RADON FLUX (ATOMS PER SQUARE METER PER SECOND)		DIFFUSIVITY (SQUARE CENTI- METERS PER SECOND)
		INDIVIDUAL	MEAN	
FIRST DEPLOYMENT				
1- 6-88	360.0	298	298	---
1-13-88	528.0	51	174	---
SECOND DEPLOYMENT				
1-29-88	44.0	357	357	$7.4 \times 10^{-5}$
2- 1-88	117.5	194	275	$4.4 \times 10^{-5}$
2- 9-88	313.0	85	212	$2.6 \times 10^{-5}$

TABLE 16.--RADON-222 ACTIVITY LEVELS IN WATER AND BOTTOM MATERIAL IN  
PRIEN LAKE, LOUISIANA, DECEMBER 1987-FEBRUARY 1988--CONTINUED

DISTRIBUTION OF RADON-222/RADIUM-226 WITHIN A BED-SEDIMENT CORE  
COLLECTED FROM PRIEN LAKE, LOUISIANA, JANUARY 1988

DEPTH FROM SURFACE (INCHES)	RADON-222/RADIUM-226 ACTIVITY RATIO
0.0- 1.2	0.52
1.2- 2.4	0.64
2.4- 3.5	0.84
3.5- 4.7	0.85
4.7- 5.9	0.82
5.9- 8.3	0.90
8.3-10.6	1.00
10.6-13.0	0.89
13.0-15.4	1.00
15.4-18.9	0.93

TABLE 17.--CONCENTRATIONS OF METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN  
COMPOSITED TISSUE SAMPLES FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE,  
LOUISIANA, MAY 1986

BIOTA SAMPLED

ATLANTIC CROAKER - Micropogonias undulatus  
SPECKLED TROUT - Cynoscion nebulosus  
BLUE CRAB - Callinectes sapidus  
MULLET - Mugil cephalus

HARDHEAD CATFISH - Arius felis  
REDFISH - Sciaenops ocellatus  
CLAMS - Rangia cuneata  
FLounder - Paralichthys sp.

[CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM, WHOLE TISSUE BASIS; LENGTHS IN  
CENTIMETERS; WEIGHTS IN GRAMS; ND, NOT DETECTED]

BUOY 130

	ATLANTIC CROAKER	ATLANTIC CROAKER DUPLICATE	HARDHEAD CATFISH	BLUE CRAB	BLUE CRAB DUPLICATE
HEXACHLOROBENZENE	0.06	0.07	0.04	0.01	0.01
HEXACHLOROBUTADIENE	0.07	0.09	0.09	ND	ND
OCTACHLORONAPHTHALENE	ND	ND	ND	ND	ND
OCTACHLOROSTYRENE	ND	ND	0.01	ND	ND
BENZOPYRENE	ND	ND	ND	ND	ND
BENZOPERYLENE	ND	ND	ND	ND	ND
NAPHTHALENE	0.01	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND

NUMBER, SIZE, AND WEIGHT INFORMATION FOR COMPOSITE SAMPLES

ATLANTIC CROAKER		HARDHEAD CATFISH		BLUE CRAB	
LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
23.2	140.2	26.7	198.6	16.5	203.1
29.6	283.2	29.9	233.5	17.4	170.5
		32.8	293.9	14.2	153.0
		20.8	76.2	15.8	172.6
		20.5	75.6	11.2	85.4
				12.9	108.5

TABLE 17.--CONCENTRATIONS OF METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN  
COMPOSITED TISSUE SAMPLES FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE,  
LOUISIANA, MAY 1986--CONTINUED

CALCASIEU RIVER AT BAYOU D'INDE

	ATLANTIC CROAKER	SPECKLED TROUT	HARDHEAD CATFISH	BLUE CRAB	BLUE CRAB DUPLICATE
HEXACHLOROBENZENE	0.53	0.12	0.44	0.17	0.17
HEXACHLOROBUTADIENE	1.05	0.29	3.8	0.01	0.01
OCTACHLORONAPHTHALENE	ND	ND	ND	ND	ND
OCTACHLOROSTYRENE	ND	ND	ND	ND	ND
BENZOPYRENE	ND	ND	ND	ND	ND
BENZOPERYLENE	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND

LENGTH, SIZE AND WEIGHT INFORMATION FOR COMPOSITE SAMPLES

ATLANTIC LENGTH	CROAKER WEIGHT	SPECKLED LENGTH	TROUT WEIGHT	HARDHEAD LENGTH	CATFISH WEIGHT	BLUE CRAB LENGTH	CRAB WEIGHT
19.5	96.9	24.8	142.0	45.0	694.7	15.0	166.2
20.4	95.6	24.0	138.6	43.7	685.3	16.1	223.6
21.2	104.0	24.5	125.6	35.6	389.0	13.8	142.5
23.1	145.1	29.0	288.6	40.1	656.5	16.6	284.2
17.2	54.6			37.8	523.9	12.7	147.1
18.4	72.0			38.8	565.7	16.8	257.2

BAYOU D'INDE AT INDUSTRIAL OUTFALL

	PLANT MATERIAL	HARDHEAD CATFISH
HEXACHLOROBENZENE	0.31	1.1
HEXACHLOROBUTADIENE	0.32	9.9
OCTACHLORONAPHTHALENE	ND	ND
OCTACHLOROSTYRENE	0.07	0.01
BENZOPYRENE	ND	ND
BENZOPERYLENE	ND	ND
NAPHTHALENE	0.03	0.01
PHENANTHRENE	ND	0.04
FLUORANTHENE	ND	ND

NUMBER, LENGTH, AND WEIGHT INFORMATION  
FOR COMPOSITE SAMPLES

HARDHEAD LENGTH	CATFISH WEIGHT	PLANT MATERIAL WEIGHT
26.2	178.1	APPROX. 50 GRAMS
27.5	211.5	
29.5	230.4	
28.0	221.3	
27.1	185.6	
31.1	269.2	

TABLE 17.--CONCENTRATIONS OF METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN  
COMPOSITED TISSUE SAMPLES FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE,  
LOUISIANA, MAY 1986--CONTINUED

CALCASIEU RIVER AT PETROLEUM REFINERY

	SPECKLED TROUT	SPECKLED TROUT	HARDHEAD CATFISH	ATLANTIC CROAKER	BLUE CRAB	CLAMS
	DUPLICATE					
HEXACHLOROBENZENE	0.12	0.09	0.12	0.02	0.04	0.08
HEXACHLOROBUTADIENE	0.37	0.20	0.60	0.11	0.01	0.15
OCTACHLORONAPHTHALENE	ND	ND	ND	ND	ND	ND
OCTACHLOROSTYRENE	ND	ND	0.03	ND	ND	ND
BENZOPYRENE	ND	ND	ND	ND	ND	ND
BENZOPERYLENE	ND	ND	ND	ND	ND	ND
NAPHTHALENE	ND	0.01	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND	0.03

NUMBER, LENGTH, AND SIZE INFORMATION FOR COMPOSITE SAMPLES

SPECKLED TROUT LENGTH	WEIGHT	HARDHEAD CATFISH LENGTH	WEIGHT	ATLANTIC CROAKER LENGTH	WEIGHT	BLUE CRAB LENGTH	WEIGHT	CLAMS 25 CLAMS, THE AVERAGE WEIGHT WAS 4 GRAMS
30.1	255.6	33.1	317.1	27.4	288.6	17.8	256.8	
25.2	157.9	31.2	304.0	23.3	170.2	15.2	181.4	
24.5	135.1	29.9	287.1	31.2	348.2	13.1	124.9	
24.8	144.0	27.1	202.0	21.6	107.3	13.7	131.0	
24.6	141.8	26.3	185.6	22.3	119.6	10.5	70.3	
24.9	147.5	24.8	152.6	21.1	98.6	11.0	85.3	
				20.0	91.2	12.4	108.7	
				22.1	141.3	10.2	87.2	

CALCASIEU RIVER AT BURTON LANDING

	SPECKLED TROUT	SPECKLED TROUT	HARDHEAD CATFISH	HARDHEAD CATFISH	MULLET	CLAMS
	DUPLICATE					
HEXACHLOROBENZENE	0.09	0.08	0.06	0.06	4.0	0.4
HEXACHLOROBUTADIENE	0.15	0.10	0.39	0.37	3.6	1.7
OCTACHLORONAPHTHALENE	ND	ND	ND	ND	ND	ND
OCTACHLOROSTYRENE	ND	ND	0.02	0.04	ND	ND
BENZOPYRENE	ND	ND	ND	ND	ND	ND
BENZOPERYLENE	ND	ND	ND	ND	ND	ND
NAPHTHALENE	0.01	ND	ND	ND	0.10	ND
PHENANTHRENE	ND	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND	ND

TABLE 17.--CONCENTRATIONS OF METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS IN  
COMPOSITED TISSUE SAMPLES FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE,  
LOUISIANA, MAY 1986--CONTINUED

CALCASIEU RIVER AT BURTON LANDING--CONTINUED

	ATLANTIC REDFISH	ATLANTIC CROAKER	DUPLICATE CROAKER	BLUE CRAB	FLOUNDER
HEXACHLOROBENZENE	0.02	0.04	0.06	0.01	0.05
HEXACHLOROBUTADIENE	0.03	0.13	0.10	ND	0.15
OCTACHLORONAPHTHALENE	ND	ND	ND	ND	ND
OCTACHLOROSTYRENE	ND	ND	ND	ND	0.01
BENZOPYRENE	ND	ND	ND	ND	ND
BENZOPERYLENE	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND	ND

LOWER LEVEL OF DETECTION FOR ORGANOCHLORINES = 0.01 MG/KG FOR TISSUE.

LOWER LEVEL OF DETECTION FOR POLYNUCLEAR AROMATIC HYDROCARBONS = 0.01 MG/KG FOR  
TISSUE.

NUMBER, LENGTH, AND SIZE INFORMATION FOR COMPOSITE SAMPLES

SPECKLED TROUT	HARDHEAD CATFISH	HARDHEAD CATFISH	CLAMS	
LENGTH	WEIGHT	LENGTH	WEIGHT	31 CLAMS, AVERAGE
31.0	292.0	38.0	782.5	27.0 212.5
29.0	231.0	42.0	745.5	28.0 212.5
24.5	138.5			25.0 171.4

MULLET	REDFISH	ATLANTIC CROAKER	BLUE CRAB		
LENGTH	WEIGHT	LENGTH	WEIGHT	LENGTH	WEIGHT
23.5	123.0	26.0	260.0	24.5	221.4
25.5	174.2			20.0	95.0
				19.5	101.1
				18.0	73.0
				21.0	109.0

FLOUNDER	
LENGTH	WEIGHT
37.0	653.5

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TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988

301234093173600 - INDUSTRIAL OUTFALL AT LOCKPORT MARSH BRIDGE

CADMUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS C)	MERCURY TOT. IN BOT. MAT. (GM/KG AS C)	CARBON, ORGANIC TOT. IN BOT. MAT. (GM/KG AS C)	ACE- NAPHTH- YLENE BOT. MAT (UG/KG)	ACRYLO- NITRILE BOT. MAT (UG/KG)
JUN 1988 20... .0600		1 20	20	5500 BENZO K FLUOR- AN-	BENZO AN- PYRENE THENE BENZENE BOT. MAT (UG/KG)	BIS (2- CHLORO- ETHYL) ETHER METHANE BOT. MAT (UG/KG)	BIS (2- CHLORO- ETHYL) ISO- PROPYL METHANE BOT. MAT (UG/KG)	BIS (2- CHLORO- ETHYL) PHTHAL- ATE FORM ATE BOT. MAT (UG/KG)
DATE TIME (UG/KG)	DATE TIME (UG/KG)							
JUN 1988 20... <380		<760	<76	760 CHLORO- CHLORO- METHANE ETHANE BOT. MAT BOT. MAT (UG/KG)	760 CHRY- SENE FORM BOT. MAT BOT. MAT (UG/KG)	760 DI- CHLORO- PHTHAL- ATE BOT. MAT BOT. MAT (UG/KG)	760 DI- METHYL PHTHAL- ATE BOT. MAT BOT. MAT (UG/KG)	760 N- SODI- PHENYL- AMINE BOT. MAT (UG/KG)
DATE TIME (UG/KG)	DATE TIME (UG/KG)							
JUN 1988 20... <76		<76	<76	780 INDENO (1,2,3- CD)	780 METHYL BROMIDE BOT. MAT BOT. MAT (UG/KG)	760 METHYL CHLOR- IDE IDE BOT. MAT (UG/KG)	760 METHY- LENE CHLOR- IDE IDE BOT. MAT (UG/KG)	760 N-NITRO- SODI-N- PHENYL- LAMINE BOT. MAT (UG/KG)
DATE TIME (UG/KG)	DATE TIME (UG/KG)							
JUN 1988 20... <760		<380	<76	76 PYRENE BOT. MAT (UG/KG)	76 PHORONE BOT. MAT BOT. MAT (UG/KG)	76 METHYL ENE BOT. MAT (UG/KG)	76 VINYL CHLORO- FLUORO- ENE BOT. MAT (UG/KG)	76 1,1-DI- CHLORO- ETHYL- ENE LENE BOT. MAT (UG/KG)
DATE TIME (UG/KG)	DATE TIME (UG/KG)							
JUN 1988 20... 2800		83	<15	98 TETRA- CHLORO- ETHY- LENE BOT. MAT (UG/KG)	98 TOLUENE BOT. MAT BOT. MAT (UG/KG)	76 TRI- CHLORO- ETHYL- ENE BOT. MAT (UG/KG)	76 1,1-DI- CHLORO- ETHYL- ENE LENE BOT. MAT (UG/KG)	76 1,1,2- TRI- CHLORO- ETHANE ETHANE BOT. MAT (UG/KG)
DATE TIME (UG/KG)	DATE TIME (UG/KG)							

BENZO A	ANTHRACENE, 1,2-DI-CHLOROBENZENE	1,2-DI-CHLOROBENZENE	1,2-TRA NS-DI-CHLORO-ETHENE	1,2,4-TRI-CHLORO-ETHENE	1,2,5,6-DIBENZ-ANTHRA-CENE	1,3-DI-CHLORO-BENZENE	1,4-DI-CHLORO-BENZENE	2-CHLORO-ETHYL VINYL ETHER	2-CHLORO-NAPHTHALENE	2-CHLOROPHENOL
ENE1, 2-BENZANTHRACENE	1,2-DI-CHLOROBENZENE	1,2-DI-CHLOROBENZENE	1,2-TRA NS-DI-CHLORO-ETHENE	1,2,4-TRI-CHLORO-ETHENE	1,2,5,6-DIBENZ-ANTHRA-CENE	1,3-DI-CHLORO-BENZENE	1,4-DI-CHLORO-BENZENE	2-CHLORO-ETHYL VINYL ETHER	2-CHLORO-NAPHTHALENE	2-CHLOROPHENOL
DATE	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)
JUN 1988 20...	<380	<76	3100	<76	<76	26000	<760	<380	1000	<380
2-NITRO-PHENOL BOT. MAT (UG/KG)	DL-N-OCTYL PHTHALATE	2,4-DI-CHLOROPHENOL	2,4-DI-NITRO-BOTTOM PHENOL	2,4-DI-NITRO-BOTTOME PHENOL	2,4-DI-NITRO-BENZENE	2,6-DI-CHLOROBENZENE	2,6-DI-NITRO-BENZENE	BROMOPHENYL	CHLOROPHENYL	CHLOROPHENYL
DATE	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/L)	BOT. MAT (UG/L)	BOT. MAT (UG/L)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)
JUN 1988 20...	<380	<760	<380	<380	<380	<1500	<1500	<380	<1900	<380
4-NITRO-PHENOL BOT. MAT (UG/KG)	4,6-DINITRO-C6H-5OH CRESOL	PHENOL (C6H-5OH)	TRANS-1,3-DI-CHLORO-PROPENE	CIS-1,3-DI-CHLORO-PROPENE	PENTA-CHLOROPHENOL	DI-N-BUTYL-PHTHALATE	DI-N-BUTYL-PHTHALATE	HEXA-CHLOROBENZENE	HEXA-CHLOROBENZENE	HEXA-CHLOROBENZENE
DATE	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/L)	BOT. MAT (UG/L)	BOT. MAT (UG/L)	BOT. MAT (UG/L)	BOT. MAT (UG/L)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	BOT. MAT (UG/KG)
JUN 1988 20...	<2300	<2300	1300	<0.08	<15	<2300	<380	<380	<3800	<3800
CHLORDANE, TOTAL IN BOT-TOM MA-TIAL	DDD, TOTAL IN BOT-TOM MA-TIAL	DDE, TOTAL IN BOT-TOM MA-TIAL	DDT, TOTAL IN BOT-TOM MA-TIAL	DI-AZINON, TOTAL IN BOT-TOM MA-TIAL	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TIAL	ENDRIN, TOTAL IN BOT-TOM MA-TIAL	ETHION, TOTAL IN BOT-TOM MA-TIAL	PCB, TOTAL IN BOT-TOM MA-TIAL	PCN, TOTAL IN BOT-TOM MA-TIAL	PCN, TOTAL IN BOT-TOM MA-TIAL
DATE	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)
JUN 1988 20...	<1000	<1000	<1000	<1000	<10	<1000	<1000	<10	<10000	<10000
HEPTACHLOR-EPOXIDE	HEPTA-CHLOR-EPOXIDE	LINDANE, TOTAL IN BOT-TOM MA-TIAL	MALA-THION, TOTAL IN BOT-TOM MA-TIAL	METH-OXY-CHLOR, TOTAL IN BOT-TOM MA-TIAL	METHYL TRI-THION, TOTAL IN BOT-TOM MA-TIAL	MIREX, TOTAL IN BOT-TOM MA-TIAL	MIREX, TOTAL IN BOT-TOM MA-TIAL	TOXA-PHENE, TOTAL IN BOT-TOM MA-TIAL	TOXA-PHENE, TOTAL IN BOT-TOM MA-TIAL	TOXA-PHENE, TOTAL IN BOT-TOM MA-TIAL
DATE	BOTTOM MATL.	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)	TERIAL (UG/KG)
JUN 1988 20...	<1000	<1000	<1000	<10	<1000	<10	<1000	<10	<1000	<1000

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

301234093174900 - INDUSTRIAL OUTFALL CANAL AT BRIDGE 0.25 MILE ABOVE MOUTH

DATE	TIME	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS SO <sub>4</sub> )	FLUO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS F)	SOLIDS, RESIDUE AT 180° DEG. C DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)		
JUN 1988 20... .	1445	180	540	5500	180	1200	9400	0.6	20	18000	0.01	0.10
JUN 1988 20... .	0.25	0.58	0.15	<1	<1	<1	20	1	4.0	940	80	11000
JUN 1988 20... .	5	<5	70	220	140	270	<0.1	<0.1	1.6	4.1	33	<5.0
JUN 1988 20... .	<580	<5.0	<580	<1200	<1200	<5.0	<580	<10	<1200	<120	<10	<1200
BENZO- A- PYRENE	BENZO- A- PYRENE TOTAL (UG/L)	BIS 2- CHLORO- ETHYL ETHER TOTAL (UG/KG)	ACRO- LEIN BOT.MAT (UG/KG)	ACRYLO- NITRILE BOT.MAT (UG/KG)	ANTHRA- CENE TOTAL (UG/L)	ANTHRA- CENE BOT.MAT (UG/KG)	AN- THENE TOTAL (UG/L)	BENZO B FLUOR- AN- THENE TOTAL (UG/KG)	BENZO B FLUOR- AN- BENZENE BOT.MAT (UG/KG)	BENZO K FLUOR- AN- BENZENE THENE TOTAL (UG/L)	BENZO K FLUOR- AN- BENZENE THENE TOTAL (UG/KG)	



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

1,2-DI-CHLOROBENZENE BOT. MAT (UG/KG)	DATE JUN 1988 20...	1,2-TRACHLORO-PROPANE BOT. MAT (UG/KG)	1,2-TRI-CHLORO-BENZENE TOTAL (UG/L)	1,2,4-CHLORO-NAPHTH-ETHER BOT. MAT (UG/L)	1,2,4-CHLORO-NAPHTH-ETHER BOT. MAT (UG/L)	1,2,4-CHLORO-NAPHTH-ETHER BOT. MAT (UG/L)	1,2,4-CHLORO-NAPHTH-ETHER BOT. MAT (UG/L)	1,2,4-CHLORO-NAPHTH-ETHER BOT. MAT (UG/L)	1,2,4-CHLORO-NAPHTH-ETHER BOT. MAT (UG/L)	1,2,4-CHLORO-NAPHTH-ETHER BOT. MAT (UG/L)	1,2,4-CHLORO-NAPHTH-ETHER BOT. MAT (UG/L)	1,2,4-CHLORO-NAPHTH-ETHER BOT. MAT (UG/L)	1,2,4-CHLORO-NAPHTH-ETHER BOT. MAT (UG/L)	
4,400	<120	<120	<120	<5.0	<11000	<10	<1200	<5.0	<580	<5.0	<580	<5.0	<580	
2-Chloro-Ethyl-Vinyl-Ether BOT. MAT (UG/L)	DATE JUN 1988 20...	2-Chloro-Naphthalene TOTAL (UG/L)	2-Chloro-Naphthalene TOTAL (UG/L)	2-Chloro-Naphthalene TOTAL (UG/L)	2-Chloro-Naphthalene TOTAL (UG/L)	2-Chloro-Naphthalene TOTAL (UG/L)	2-Chloro-Naphthalene TOTAL (UG/L)	2-Chloro-Naphthalene TOTAL (UG/L)	2-Chloro-Naphthalene TOTAL (UG/L)	2-Chloro-Naphthalene TOTAL (UG/L)	2-Chloro-Naphthalene TOTAL (UG/L)	2-Chloro-Naphthalene TOTAL (UG/L)	2-Chloro-Naphthalene TOTAL (UG/L)	
		<120	<5.0	<580	<5.0	<580	<5.0	<580	<5.0	<580	<10	<1200	<5.0	<580
2,4-DI-METHYL-PHENOL TOTAL (UG/L)	DATE JUN 1988 20...	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	
		<5.0	<580	<5.0	<580	<20	<2300	<20	<2300	<20	<2300	<5.0	<580	
3,3'-DI-CHLOROBENZIDINE BOT. MAT (UG/KG)	DATE JUN 1988 20...	4-Bromo-Phenyl-Ether TOTAL (UG/L)	4-Bromo-Phenyl-Ether TOTAL (UG/L)	4-Bromo-Phenyl-Ether TOTAL (UG/L)	4-Bromo-Phenyl-Ether TOTAL (UG/L)	4-Bromo-Phenyl-Ether TOTAL (UG/L)	4-Bromo-Phenyl-Ether TOTAL (UG/L)	4-Bromo-Phenyl-Ether TOTAL (UG/L)	4-Bromo-Phenyl-Ether TOTAL (UG/L)	4-Bromo-Phenyl-Ether TOTAL (UG/L)	4-Bromo-Phenyl-Ether TOTAL (UG/L)	4-Bromo-Phenyl-Ether TOTAL (UG/L)	4-Bromo-Phenyl-Ether TOTAL (UG/L)	
		<2900	<5.0	<580	<5.0	<580	<5.0	<580	<30	<3500	<30	<3500	<0.1	
Phenol (C6H-5OH) BOT. MAT (UG/KG)	DATE JUN 1988 20...	Trans-1,3-Di-CHLOROPROPENE TOTAL (UG/L)	CIS-1,3-DI-CHLOROPROPENE TOTAL (UG/L)	Penta-Chloro-Phenol TOTAL (UG/L)	Penta-Chloro-Phenol TOTAL (UG/L)	Penta-Chloro-Phenol TOTAL (UG/L)	Penta-Chloro-Phenol TOTAL (UG/L)	Penta-Chloro-Phenol TOTAL (UG/L)	Penta-Chloro-Phenol TOTAL (UG/L)	BIS(2-Ethyl Hexyl) PHTHALATE	DI-N-Butyl PHTHALATE	DI-N-Butyl PHTHALATE	DI-N-Butyl PHTHALATE	
<580	5.0	<0.12	<0.12	<30	<3500	<5.0	<2800	<5.0	<580					



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL DATE JUN 1988 20...	IRON, TOTAL IRON, DIS- SOLVED SOLVED (UG/L AS FE) 10 3300	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS FE) 40 3100	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) <5 5	LEAD, FM BOT- TOM MA- TERIAL (UG/L AS PB)	LEAD, FM BOT- TOM MA- TERIAL (UG/G AS MN)	MANGA- NESE, RECOV- DIS- SOLVED TERIAL (UG/L AS MG)	MANGA- NESE, RECOV- DIS- SOLVED TERIAL (UG/L AS MG)
MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG) 0.35	CARBON, ORGANIC TOT. IN BOTTOM MAT. (GM/KG AS C) 3.3	CARBON, DI- CHLORO- BROMO- METHANE TOTAL (UG/L) 38	CARBON- TETRA- CHLORO- ETHANE TOTAL (UG/L) <0.2	1,2-DI- CHLORO- FORM TOTAL (UG/L) (UG/L)	BROMO- FORM TOTAL (UG/L) (UG/L)	CHLORO- METHANE TOTAL (UG/L) (UG/L)	CHLORO- DI- METHANE TOTAL (UG/L) (UG/L)
ACE- NAPHTH- YLENE DATE BOT.MAT (UG/KG) JUN 1988 20...	ACE- NAPHTH- ENE TOTAL (UG/L) <780	ACE- NAPHTH- ENE LEIN BOT.MAT (UG/KG) <5.0	ACRYLO- NITRILE BOT.MAT (UG/KG) <780	ANTHRA- CENE BOT.MAT (UG/KG) <1600	ANTHRA- CENE BOT.MAT (UG/KG) <5.0	FLUOR- AN- THENE BOT.MAT (UG/KG) <780	FLUOR- AN- THENE BOT.MAT (UG/KG) <1600
BENZO- A- PYRENE DATE TOTAL (UG/L) JUN 1988 20...	BENZO- A- PYRENE TOTAL (UG/KG) <10	BIS 2- CHLORO- ETHYL ETHER TOTAL (UG/L) <5.0	BIS (2- CHLORO- ETHYL) ETHER TOTAL (UG/L) <780	BIS (2- CHLORO- ETHOXO) METHANE TOTAL (UG/KG) <5.0	BIS (2- CHLORO- ISO- PROPYL) METHANE TOTAL (UG/KG) <780	BIS (2- CHLORO- ISO- PROPYL) METHANE TOTAL (UG/KG) <5.0	BIS (2- CHLORO- BENZYL) BENZENE TOTAL (UG/KG) <160
CHLORO- BENZENE DATE TOTAL (UG/L) JUN 1988 20...	CHLORO- BENZENE BOT.MAT (UG/KG) <0.2	CHLORO- METHANE BOT.MAT (UG/KG) <160	CHLORO- ETHANE BOT.MAT (UG/KG) <0.2	CHLORO- ETHANE BOT.MAT (UG/KG) <160	CHLORO- SENE BOT.MAT (UG/KG) <10	CHRY- SENE BOT.MAT (UG/KG) <1600	CHRY- SENE BOT.MAT (UG/KG) <5.0

DI-METHYL-PHTHAL-ATE	DATE	JUN 1988	20...	<780	<0.2	<160	<5.0	<780	<5.0	<780	<5.0	<780	<5.0	<780	<10
INDENO-(1,2,3-CD) PYRENE	DATE	BOT.MAT (UG/KG)	ISO-BPHORONE TOTAL (UG/L)	ETHYL-BENZENE TOTAL (UG/KG)	ANTHENE TOTAL (UG/L)	FLUOR-ANTHENE BOT.MAT (UG/KG)	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE BOT.MAT (UG/KG)	FLUOR-ENE TOTAL (UG/L)	CHLORO-PENTADIENE TOTAL (UG/KG)	CHLORO-PENTADIENE TOTAL (UG/L)	HEXA-ADRIENE TOTAL (UG/KG)	HEXA-ADRIENE TOTAL (UG/L)	HEXA-CHLORO-CYCLO-PENTADIENE TOTAL (UG/KG)	INDENO-(1,2,3-CD) PYRENE
DATE	JUN 1988	20...	<1600	<5.0	<0.2	<780	<160	<160	<0.2	<160	<0.4	270	<5.0	<780	<5.0
N-NITRO-SODI-PHENY-LAMINE	DATE	JUN 1988	20...	<780	<780	<780	<5.0	<780	<30	<4700	<5.0	<780	<5.0	<780	<780
TETRA-CHLORO-ETHYL-ENE	DATE	JUN 1988	20...	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	ALENE TOTAL (UG/KG)	NAPHTH-ALENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BENZENE TOTAL (UG/KG)	NITRO-BENZENE TOTAL (UG/L)	CRESOL TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	N-NITRO-SODI-PHENY-LAMINE TOTAL (UG/L)
CHLORO-ETHANE	DATE	JUN 1988	20...	4.5	<160	<31	<160	<0.2	<160	<160	<0.2	<160	<0.2	<160	<0.2
1,1,1-TRI-CHLORO-ETHANE	DATE	JUN 1988	20...	0.4	2800	<0.2	<160	0.8	<160	<10	<1600	<5.0	<780	<5.0	<160

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

		BIS(2-ETHYLHEXYL)	BIS(2-ETHYLHEXYL)	DI-N-BUTYL	DI-N-BUTYL	BENZI-DINE	BENZI-DINE	VINYL CHLO- RIDE	TRI-CHLORO- ETHEYL-ENE	AROCLOR-1221 PCB TOTAL (UG/L)
PENTA-CHLOROPHENOL	1,2-DIBROMO-ETHYL-ETEYL-ENE	PHthalate	PHthalate	PHthalate	PHthalate	TOT.MAT (UG/KG)	TOT.MAT (UG/KG)	TOT.MAT (UG/KG)	TOT.MAT (UG/L)	TOTAL (UG/L)
DATE BOT.MAT (UG/KG)	JUN 1988 20...	<4700	<0.2	<5.0	2600	<5.0	<780	<50	<7800	<0.2
DATE TOTAL (UG/L)	JUN 1988 20...	1232 PCB	1242 PCB	1254 PCB	1260 PCB	1254 PCB	1260 PCB	1254 PCB	1260 PCB	1254 PCB
DATE TOTAL (UG/L)	JUN 1988 20...	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<780	<5.0	<780 <0.2 <0.2
ALDRIN, DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	JUN 1988 20...	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	EETHION, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
DATE TOTAL (UG/KG)	JUN 1988 20...	<100	<100	<100	<100	<100	<100	<100	<100	<100 <0.1 <1000
HEPTA-CHLOR-EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	JUN 1988 20...	HEPTA-CHLOR-TOTAL IN BOTTOM MATL. (UG/KG)	MALATHION, TOTAL IN BOTTOM MATL. (UG/KG)	METHYL OXY-CHLOR, TOTAL IN BOTTOM MATL. (UG/KG)	METHYL TRI-CHLOR, TOTAL IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATL. (UG/KG)	PARATHION, TOTAL IN BOTTOM MATL. (UG/KG)	PER-THANE, TOTAL IN BOTTOM MATL. (UG/KG)	TOXA-PHENNE, TOTAL IN BOTTOM MATL. (UG/KG)
DATE TOTAL (UG/KG)	JUN 1988 20...	<100	<100	<10	<100	<10	<100	<100	<100	<100 <0.1 <1000
301205093201800 - BAYOU D'INDE 1 MILE BELOW LITTLE BAYOU D'INDE										
SPECIFIC CON-DUCT-ANCE	DATE TIME (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN- DIS-SOLVED (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS MG)	MAGNE-SIUM DIS-SOLVED (MG/L AS NA)	SODIUM DIS-SOLVED (MG/L AS K)	POTAS-SIUM DIS-SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
JUN 1988 20...	1030	17400	7.20	29.0	2.3	140	340	3500	110	810
									6200	0.4

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

SOLIDS, SILICA, DIS- SOLVED (MG/L AS SI02)	NITRO- GEN, AT 180 NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. SOLVED (MG/L AS N)	NITRO- GEN, AM- MONIA + ORGANIC DIS. SOLVED (MG/L AS P)	PHOS- PHOROUS DIS- SOLVED (MG/L AS N)	CADMUM TOTAL RECOV- ERABLE (UG/L AS PB)	CADMUM TOTAL RECOV- ERABLE (UG/L AS MN)	CADMUM TOTAL DIS- SOLVED (UG/L AS CD)	CADMUM FM BOT- TOM MA- TERIAL (UG/L AS HG)	CADMUM FM BOT- TOM MA- TERIAL (UG/L AS MN)	CADMUM FM BOT- TOM MA- TERIAL (UG/L AS CR)	
JUN 1988 20... .	15	12100	<0.01	<0.02	0.66	1.0	0.40	<1	<1	<1	10	1
CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	IRON, TOTAL IRON, DIS- SOLVED (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/L AS PB)	IRON', RECOV. FM BOT- TOM MA- TERIAL (UG/L AS PE)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, FM BOT- TOM MA- TERIAL (UG/L AS PB)	LEAD, FM BOT- TOM MA- TERIAL (UG/L AS PB)	LEAD, FM BOT- TOM MA- TERIAL (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS HG)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	
JUN 1988 20... .	130	340	90	21000	<5	<5	60	550	550	150	<0.1	<0.1
MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (GM/KG AS C)	CARBON, DI- CHLORO- BROMO- CHLO- RIDE METHANE TOTAL (UG/L)	CARBON- TETRA- CHLORO- ETHANE RIDE METHANE TOTAL (UG/L)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	CHLORO- METHANE TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ACE- NAPHTH- YLENE TOTAL (UG/KG)
JUN 1988 20... .	0.68	3.5	45	0.3	<0.2	3.1	11	1.0	2.6	<0.2	<0.2	<5.0
ACE- NAPHTH- YLENE TOTAL (UG/KG)	ACE- NAPHTH- ENE TOTAL (UG/L)	ACRO- LEIN BOT.MAT (UG/KG)	ACRYLO- NITRILE BOT.MAT (UG/KG)	ANTHRA- CENE BOT.MAT (UG/KG)	ANTHRA- CENE TOTAL (UG/L)	ANTHRA- CENE BOT.MAT (UG/KG)	BENZO B FLUOR- AN- THENE TOTAL (UG/L)	BENZO B FLUOR- AN- THENE BOT.MAT (UG/KG)	BENZENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ACE- NAPHTH- PYRENE TOTAL (UG/L)
JUN 1988 20... .	<830	<5.0	<830	<1700	<1700	<5.0	<830	<10	<1700	<170	<10	<1700
BENZO- A- PYRENE TOTAL (UG/L)	BENZO- A- PYRENE TOTAL (UG/KG)	BIS 2- CHLORO- ETHYL ETHER TOTAL (UG/L)	BIS (2- CHLORO- ETHYL) ETHER TOTAL (UG/KG)	BIS (2- CHLORO- ETHOXYSY) METHANE TOTAL (UG/L)	BIS (2- CHLORO- ISO- PROPYL) ETHER TOTAL (UG/KG)	BIS (2- CHLORO- ETHOXYSY) METHANE TOTAL (UG/L)	BROMO- ETHER TOTAL (UG/KG)	BROMO- ETHER TOTAL (UG/L)	N-BUTYL BENZYL PHTHAL- ATE TOTAL (UG/L)	N-BUTYL BENZYL PHTHAL- ATE TOTAL (UG/L)	N-BUTYL BENZYL PHTHAL- ATE TOTAL (UG/L)	CARBON TETRA- CHLOR- IDE TOTAL (UG/KG)
JUN 1988 20... .	<10	<1700	<5.0	<830	<5.0	<830	<5.0	<830	<170	<5.0	<830	<170

DATE	BOT. MAT (UG/KG)	CHLORO- BENZENE TOTAL	CHLORO- METHANE BOT. MAT	CHLORO- ETHANE TOTAL	CHLORO- FORM BOT. MAT	CHRY- SENE TOTAL	CHRY- SENE BOT. MAT	DI- CHLORO- PHTHAL- ATE	DIETHYL PHTHAL- ATE	METHYL PHTHAL- ATE
JUN 1988 20...	<0.2	<170	<170	<0.2	<170	<10	<1700	TOTAL	BOT. MAT	TOTAL
								(UG/KG)	(UG/L)	(UG/L)
DATE	BOT. MAT (UG/KG)	INDENO (1,2,3- CD) PYRENE	ETHYL- BENZENE TOTAL	ETHYL- BENZENE BOT. MAT	FLUOR- ANTHENE TOTAL	FLUOR- ENE BOT. MAT	FLUOR- ENE TOTAL	CHLORO- CYCLO- PENT- ADIENE	CHLORO- CYCLO- PENT- ADIENE	INDENO (1,2,3- CD) PYRENE
JUN 1988 20...	<830	<0.2	<170	<0.2	<830	<5.0	<830	TOTAL	BOT. MAT	TOTAL
								(UG/L)	(UG/KG)	(UG/L)
DATE	BOT. MAT (UG/KG)	N-NITRO -SODI- PHENY- LAMINE	ISO- PHORONE TOTAL	METHYL- BROMIDE TOTAL	ISO- PHORONE BOT. MAT	METHYL BROMIDE TOTAL	METHYL CHLO- RIDE TOTAL	METHYL- CHLOR- IDE TOTAL	METHYL- CHLOR- IDE TOTAL	N-NITRO -SODI- PHENY- LAMINE
JUN 1988 20...	<1700	<5.0	<0.2	<830	<170	<0.2	<170	TOTAL	BOT. MAT	TOTAL
								(UG/L)	(UG/KG)	(UG/L)
DATE	BOT. MAT (UG/KG)	TETRA- CHLORO- ETHYL- ENE	TETRA- CHLORO- ETHYL- ENE	TETRA- CHLORO- ETHYL- ENE	TRI- CHLORO- FLUORO- ENE	TRI- CHLORO- FLUORO- ENE	TRI- CHLORO- FLUORO- METHANE	VINYL CHLORO- IDe TOTAL	1,1-DI- CHLORO- ETHANE TOTAL	1,1-DI- CHLORO- ETHYL- ENE
JUN 1988 20...	4.4	<170	<33	<170	<0.2	<170	<30	(UG/L)	(UG/KG)	(UG/L)

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

			DI-CHLORO-				TRANS-1,3-DI-CHLORO-CHLOROPHENOL TOTAL (UG/L)	CIS-1,3-DI-CHLORO-CHLOROPHENOL TOTAL (UG/L)
4-NITRO-PHENOL BOT.MAT (UG/KG)	DATE JUN 1988 20...	DINTRO-ORTHO-CRESOL TOTAL (UG/L)	DI-FLUOROMETHANE TOTAL (UG/L)	AROCLOL PCB TOTAL (UG/L)	PHENOL (C6H-5OH) TOTAL (UG/L)	NAPHTH-ALENE TOTAL (UG/L)	1.3-DI-CHLORO-CHLOROPHENOL TOTAL (UG/L)	PENTA-CHLOROPHENOL TOTAL (UG/L)
<5000	<30	<5000	<0.2	<0.1	<5.0	<830	<0.2	<0.2
PENTA-CHLOROPHENOL BOT.MAT (UG/KG)	DATE JUN 1988 20...	1,2-DIBROMO-ETHYL-ENE TOTAL (UG/L)	BIS(2-ETHYLHEXYL) PHTHALATE TOTAL (UG/KG)	DI-N-BUTYL-BUTYL PHTHALATE TOTAL (UG/L)	DI-N-BUTYL-BUTYL PHTHALATE TOTAL (UG/KG)	BENZI-DINE TOTAL (UG/L)	VINYL CHLORIDE TOTAL (UG/L)	TRI-CHLORO-ETHYLENE TOTAL (UG/L)
<5000	<0.2	<5.0	<830	<5.0	<830	<50	<8300	<0.2
AROCLOL PCB TOTAL (UG/L)	DATE JUN 1988 20...	AROCLOL PCB TOTAL (UG/L)	AROCLOL PCB TOTAL (UG/L)	AROCLOL PCB TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	XYLENE TOTAL (UG/L)
1232	1242	1248	1254	1260	TOT. IN BUTTOM MA-TOM MA-TOTAL TERIAL (UG/KG)	TOT. IN BUTTOM MA-TOM MA-TOTAL TERIAL (UG/KG)	TOT. IN BUTTOM MA-TOM MA-TOTAL TERIAL (UG/KG)	WATER WHOLE REC (UG/L)
<0.1	<0.1	<0.1	<0.1	<0.1	<10	<10	<10	<10
ALDRIN, DANE, TOTAL IN BOT-TOM MA-TOTAL TERIAL (UG/KG)	DATE JUN 1988 20...	CHLORDANE, DDD, TOTAL IN BOT-TOM MA-TOTAL TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TOTAL TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TOTAL TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA-TOTAL TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TOTAL TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TOTAL TERIAL (UG/KG)	PCB, TOTAL IN BOT-TOM MA-TOTAL TERIAL (UG/KG)
<10	<10	<10	<10	<10	<5.0	<830	<5.0	<830 <0.2 0.3
HEPTACHLOR-EPOXIDE TOTAL IN BOT-BOTTOM TOM MA-MATL. (UG/KG)	DATE JUN 1988 20...	HEPTACHLOR-EPOXIDE TOTAL IN BOT-BOTTOM TOM MA-MATL. (UG/KG)	MALA-LINDANE TOTAL IN BOT-BOTTOM TOM MA-MATL. (UG/KG)	METH-OXY-THION, TOTAL IN BOT-BOTTOM TOM MA-MATL. (UG/KG)	METHYL-TRI-CHLOR-THION, TOTAL IN BOT-BOTTOM TOM MA-MATL. (UG/KG)	MIREX, TOTAL IN BOT-BOTTOM TOM MA-MATL. (UG/KG)	PARATHION, TOTAL IN BOT-BOTTOM TOM MA-MATL. (UG/KG)	TOXAPHENE, TOTAL IN BOT-BOTTOM TOM MA-MATL. (UG/KG)
<10	<10	<10	<10	<10	<10	<10	<10	<100 <100 <100 <100 <100 <100 <100 <100 <100

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301203093195900 - BAYOU D'INDE 0.5 MILE ABOVE HIGHWAY 108

SPE-CIFIC CON-DUCT-	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L AS CA)	CALCIUM, DIS-SOLVED (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
DATE TIME	(US/CM)						
JUN 1988 20...	1100	15100	7.20	29.0	1.1	140	360
SILICA, RESIDUE AT 180 DEG C SOLVED AS SIO2)	NITRO-GEN, NITRITE NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, MONIA + ORGANIC DIS-SOLVED (MG/L AS N)	PHOS-PHOROUS, DIS-SOLVED (MG/L AS P)	CADMIUM, RECOV-EABLE (UG/L AS CD)	CADMIUM, RECOV-EABLE (UG/L AS CD)	CADMIUM, RECOV-EABLE (UG/L AS CR)
JUN 1988 20...	15	12200	<0.01	<0.02	0.69	1.0	0.38
CHRO-MIUM, RECOV-FM BOT-TOM MA-TERIAL (UG/G AS FE)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV-FM BOT-TOM MA-TERIAL (UG/G AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, FM BOT-TOM MA-TERIAL (UG/G AS MN)	LEAD, FM BOT-TOM MA-TERIAL (UG/G AS MN)	MANGANESE, RECOV-FM BOT-TOM MA-TERIAL (UG/G AS HG)
JUN 1988 20...	50	360	110	3400	<5	<5	<1
MERCURY RECOV-FM BOT-TOM MA-TERIAL (UG/G AS HG)	CARBON, ORGANIC TOT. IN DIS-SOLVED MAT. (GM/KG AS C)	CARBON, ORGANIC TOT. IN CHLORO-BROMETHANE TOTAL (UG/L)	CARBON-TETRA-CHLORIDE (UG/L)	1,2-DI-BROMO-ETHANE TOTAL (UG/L)	BROMO-METHANE TOTAL (UG/L)	CHLORO-BROMO-METHANE TOTAL (UG/L)	MANGANESE, RECOV-FM BOT-TOM MA-TERIAL (UG/G AS HG)
JUN 1988 20...	0.17	3.5	25	0.4	<0.2	2.6	<1
ACE-NAPHTH-YLENE BOT.MAT (UG/KG)	ACE-NAPHTH-ENE TOTAL (UG/L)	ACRO-LEIN BOT.MAT (UG/KG)	ACRYLO-NITRILLE BOT.MAT (UG/KG)	ANTHRA-CENE TOTAL (UG/L)	ANTHRA-CENE TOTAL (UG/KG)	BENZO B FLUOR-AN-THENE TOTAL (UG/KG)	ACE-NAPHTH-YLENE THENE TOTAL (UG/L)
JUN 1988 20...	<400	<5.0	<400	<810	<5.0	<400	<10 <810 <10 <10 <810 <10 <10 <810

BENZO-	BENZO-	BIS	BIS	BIS	BIS (2-	BIS (2-	N-BUTYL
A-	A-	2-	(2-	CHLORO-	CHLORO-	CHLORO-	BENZYL
PYRENE	PYRENE	CHLORO-	CHLORO-	ETHYL	ISO-	PHTHAL-	TETRA-
TOTAL	BOT.MAT	ETHYL	ETHYL	ETHER	ETHOXY)	PROPYL)	CHLOR-
(UG/L)	(UG/KG)	TOTAL	TOTAL	METHANE	METHANE	BROMO-	IDE
JUN 1988	JUN 1988	BOT.MAT	BOT.MAT	TOTAL	BOT.MAT	FORM	BOT.MAT
20...	20...	(UG/L)	(UG/KG)	(UG/L)	(UG/KG)	BOT.MAT	BOT.MAT
					(UG/L)	(UG/KG)	(UG/KG)
DI-	DI-	BROMO-	CHLORO-	CHLORO-	CHRY-	CHRY-	DI-
CHLORO-	CHLORO-	CHLORO-	CHLORO-	ETHANE	SENE	SENE	METHYL
BENZENE	BENZENE	ETHYL	ETHYL	TOTAL	TOTAL	BOT.MAT	PHTHAL-
TOTAL	BOT.MAT	METHANE	ETHANE	BOT.MAT	BOT.MAT	BOT.MAT	PHTHAL-
(UG/L)	(UG/KG)	TOTAL	TOTAL	(UG/L)	(UG/KG)	(UG/L)	ATE
JUN 1988	JUN 1988	BOT.MAT	BOT.MAT	(UG/L)			
20...	20...	(UG/L)					
DI-	DI-	BROMO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-	INDENO
METHYL	PHTHAL-	CHLORO-	CHLORO-	ETHANE	SENE	PENT-	(1,2,3-
ATE	ATE	ETHYL	ETHYL	TOTAL	TOTAL	ADIENE	CD)
BOT.MAT	BOT.MAT	BENZENE	BENZENE	BOT.MAT	BOT.MAT	TOTAL	CHLORO-
(UG/L)	(UG/KG)	TOTAL	TOTAL	(UG/L)	(UG/KG)	BOT.MAT	CHLORO-
JUN 1988	JUN 1988	BOT.MAT	BOT.MAT	(UG/L)		(UG/L)	TOTAL
20...	20...	(UG/L)					(UG/L)
INDENO	INDENO	HEXA-	HEXA-	HEXA-	HEXA-	HEXA-	NITRO-
(1,2,3-	(1,2,3-	CHLORO-	CHLORO-	CYCLO-	CYCLO-	CHLORO-	SODI-N-
CD)	CD)	CHLORO-	CHLORO-	PENT-	PENT-	PENT-	PROPYL-
PYRENE	PYRENE	CHLORO-	CHLORO-	ADIENE	ADIENE	ADIENE	AMINE
TOTAL	TOTAL	CHLORO-	CHLORO-	TOTAL	TOTAL	TOTAL	AMINE
(UG/L)	(UG/L)	CHLORO-	CHLORO-	BOT.MAT	BOT.MAT	BOT.MAT	BOT.MAT
JUN 1988	JUN 1988	CHLORO-	CHLORO-	(UG/L)	(UG/L)	(UG/L)	(UG/L)
20...	20...						
N-NITRO	N-NITRO	N-NITRO	METHYL-	METHYL-	METHYL-	METHYL-	NITRO-
-SODI-	-SODI-	-SODI-	METHYL-	METHYL-	METHYL-	METHYL-	SODI-N-
PHENY-	PHENY-	PHENY-	PHORONE	PHORONE	CHLORO-	CHLORO-	PROPYL-
LAMINE	LAMINE	LAMINE	BROMIDE	BROMIDE	RIDE	RIDE	AMINE
TOTAL	BOT.MAT	BOT.MAT	BOT.MAT	BOT.MAT	TOTAL	TOTAL	AMINE
(UG/L)	(UG/KG)	(UG/KG)	(UG/L)	(UG/L)	BOT.MAT	BOT.MAT	BOT.MAT
JUN 1988	JUN 1988	BOT.MAT	BOT.MAT	(UG/L)			
20...	20...	(UG/L)					
N-NITRO	N-NITRO	N-NITRO	NAPHTH-	NAPHTH-	NAPHTH-	PARA-	NITRO-
-SODI-	-SODI-	-SODI-	METHY-	METHY-	METHY-	CHLORO-	SODI-N-
PHENY-	PHENY-	PHENY-	LAMINE	LAMINE	BENZENE	META	PROPYL-
LAMINE	LAMINE	LAMINE	BOT.MAT	BOT.MAT	BENZENE	CRESOL	AMINE
TOTAL	BOT.MAT	BOT.MAT	BOT.MAT	BOT.MAT	TOTAL	TOTAL	AMINE
(UG/L)	(UG/KG)	(UG/KG)	(UG/L)	(UG/L)	BOT.MAT	BOT.MAT	BOT.MAT
JUN 1988	JUN 1988	BOT.MAT	BOT.MAT	(UG/L)			
20...	20...	(UG/L)					

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

	ACE-NAPHTH-YLENE	ACE-NAPHTH-ENE	ACE-NAPHTH-ENE TOTAL (UG/L)	ACRO-LEIN BOT.MAT (UG/KG)	ACRYLO-NITRILE BOT.MAT (UG/KG)	ANTHRA-CENE TOTAL (UG/L)	ANTHRA-CENE TOTAL (UG/KG)	BENZO-B FLUOR-AN-THENE	BENZO-B FLUOR-AN-THENE	BENZO-K FLUOR-AN-THENE
DATE	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
JUN 1988	20...	<840	<5.0	<780	<1600	<5.0	<780	<10	<1600	<10
										<1600
BENZO-A-PYRENE	BENZO-A-PYRENE TOTAL (UG/L)	BENZO-A-PYRENE TOTAL (UG/L)	BIS 2-ETHYL ETHER TOTAL (UG/L)	BIS (2-CHLORO-ETHYL) ETHER TOTAL (UG/L)	BIS (2-CHLORO-ETHOXY) METHANE TOTAL (UG/L)	BIS (2-CHLORO-ETHOXY) METHANE TOTAL (UG/L)	BIS (2-CHLORO-ISO-PROPYL) ETHER TOTAL (UG/L)	BIS (2-CHLORO-ISO-PROPYL) ETHER TOTAL (UG/L)	N-BUTYL BENZYL PHTHALATE	CARBON TETRA-CHLORIDE
DATE	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
JUN 1988	20...	<10	<1600	<5.0	<780	<5.0	<780	<10	<1600	<10
										<1600
CHLOROBENZENE	CHLOROBENZENE TOTAL (UG/L)	CHLOROBENZENE TOTAL (UG/L)	DL-BROMO-CHLORO-ETHANE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	CHRY-SENE TOTAL (UG/L)	CHRY-SENE TOTAL (UG/L)	DIETHYL PHTHALATE	DIETHYL PHTHALATE
DATE	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
JUN 1988	20...	<0.2	<160	<160	<0.2	<160	<10	<1600	<10	<1600
										<1600
DI-METHYL PHTHALATE	DI-METHYL PHTHALATE TOTAL (UG/L)	DI-METHYL PHTHALATE TOTAL (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	FLUOR-ANTHENENE TOTAL (UG/L)	FLUOR-ANTHENENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	HEXA-CHLOROPENTADIENE TOTAL (UG/L)	HEXA-CHLOROPENTADIENE TOTAL (UG/L)
DATE	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
JUN 1988	20...	<780	<0.2	<160	<5.0	<780	<5.0	<780	<5.0	<1600
ISO-BROMONE	ISO-BROMONE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/KG)	METHYL-BROMIDE TOTAL (UG/L)	METHYL-CHLORIDE TOTAL (UG/L)	METHYL-CHLORIDE TOTAL (UG/L)	METHYL-CHLORIDE TOTAL (UG/L)	METHYL-CHLORIDE TOTAL (UG/L)	N-NITRO-SODIUM PROPYL-AMINE TOTAL (UG/L)	N-NITRO-SODIUM PROPYL-AMINE TOTAL (UG/L)
DATE	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
JUN 1988	20...	<5.0	<0.2	<780	<160	<0.2	<160	<0.2	390	<5.0
										<780
										<780

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

HEPTA-CHLOR-EPOXIDE	HEPTA-CHLOR, TOTAL	LINDANE TOTAL	MALATHION, TOTAL	METHYL OXY-CHLOR,	METHYL PARA-TRI-THION,	MIREX, TOTAL	PARATHION, TOTAL	PER-THANE TOTAL	TOX-PHENNE, TOTAL
TOT. IN BOTTOM	IN BOT-	IN BOT-	TOT. IN BOT-	THION, TOTAL	TOT. IN BOT-	IN BOT-	IN BOT-	IN BOT-	TRI-THION, TOTAL
BOTTOM	TOM MA-TERIAL	TOM MA-TERIAL	BOTTOM	TOM MA-TERIAL	BOTTOM	TOM MA-TERIAL	TOM MA-TERIAL	TOM MA-TERIAL	TOM MA-TERIAL
DATE	MATL.	TERIAL	MATL.	MATL.	MATL.	MATL.	MATL.	MATL.	TOTAL
JUN 1988	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)
20...<10	<10	<10	<10	<10	4.3	22	14	<10	<10
SPE-CIFIC-CON-DUCT-	PH	TEMPER-ATURE	OXYGEN,	CADMIUM	IRON,	LEAD,	MANGA-NESE,	MERCURY,	CARBON,
DATE	TIME	(STAND-ARD UNITS)	DIS-SOLVED (MG/L)	RECOV. FM BOT-TOM MA-TERIAL	RECOV. FM BOT-TOM MA-TERIAL	RECOV. FM BOT-TOM MA-TERIAL	RECOV. FM BOT-TOM MA-TERIAL	RECOV. FM BOT-TOM MA-TERIAL	RECOV. FM BOT-TOM MA-TERIAL
JUN 1988	20...1145	18200	7.20	29.5	0.8	<1	50	8200	30
CARBON, ORGANIC	DI-CHLOROBROMO-METHANE	CARBON-TETRA-CHLORIDE	1,2-DI-CHLORO-ETHANE	BROMO-FORM	CHLORO-FORM	TOLUENE	BENZENE	ACE-NAPHTH-ENE	ACE-NAPHTH-ENE
DATE	TOT. IN BOTTOM MAT.	TOTAL (GM/KG AS C)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)
JUN 1988	20...42	1.0	<0.2	3.4	35	3.3	3.0	<0.2	<5.0
ACE-NAPHTH-ENE	ACRO-LEIN	ACRYLO-NITRILE	ANTHRA-CENE	ANTHRA-CENE	FLUOR-AN-THENE	FLUOR-AN-THENE	FLUOR-AN-THENE	BENZO K	BENZO K
DATE	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BENZO FLUOR-AN-THENE	BENZO FLUOR-AN-THENE
JUN 1988	20...<600	<1200	<1200	<5.0	<600	<10	<1200	<10	<1200
BIS	BIS	BIS	BIS	BIS (2-CHLORO-(2-CHLORO-CHLORO-ETHOXY)METHANE	BIS (2-CHLORO-ISO-PROPYL)ETHER	BROMO-PHENYL-ETHER	N-BUTYL BENZYL-PHTHALATE	BENZO FLUOR-AN-THENE	BENZO FLUOR-AN-THENE
2-CHLORO-ETHYL-ETHER	CHLORO-ETHYL-ETHER	CHLORO-ETHYL-ETHER	CHLORO-ETHYL-ETHER	CHLORO-ETHYL-ETHER	CHLORO-ETHYL-ETHER	CHLORO-ETHYL-ETHER	CHLORO-ETHYL-ETHER	CHLORO-ETHYL-ETHER	CHLORO-ETHYL-ETHER
DATE	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)
JUN 1988	20...<5.0	<600	<5.0	<600	<5.0	<600	<5.0	<600	<5.0



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

CIS 1,3-DI- CHLORO- PROPENE	PENTA- CHLORO- PHENOL	1,2- DIBROMO- ETHYL- ENE	BIS(2- ETHYL HEXYL) PHTHAL- ATE	DI-N- BUTYL PHTHAL- ATE	DI-N- BUTYL PHTHAL- ATE	BENZI- DINE	VINYL- CHLO- RIDE	TRI- CHLORO- ETHYL- ENE
DATE	PENTACHLOROPHENOL TOTAL (UG/L)	DIBROMOETHYLENE TOTAL (UG/L)	PHTHALATE TOTAL (UG/L)	BENZIDINE TOTAL (UG/L)	BENZIDINE TOTAL (UG/L)	BOT.MAT TOTAL (UG/KG)	BOT.MAT TOTAL (UG/L)	XYLENE TOTAL WATER
JUN 1988 20...	<0.2	<30	<3600	<0.2	<5.0	<600	<5.0	1.9
AROCLOR 1221	PCB TOTAL (UG/L)	AROCLOR 1242	AROCLOR PCB TOTAL (UG/L)	AROCLOR 1254	AROCLOR PCB TOTAL (UG/L)	HEXA- CHLORO- BENZENE TOT. IN BOT. MATL. (UG/L)	HEXA- CHLORO- BENZENE TOT. IN BOT. MATL. (UG/L)	HEXA- CHLORO- BENZENE TOT. IN BOT. MATL. (UG/L)
DATE	AROCLOR TOTAL (UG/L)	AROCLOR TOTAL (UG/L)	AROCLOR TOTAL (UG/L)	AROCLOR 1260	AROCLOR PCB TOTAL (UG/L)	ADENE TOT. IN BOT. MATL. (UG/L)	ADENE TOT. IN BOT. MATL. (UG/L)	ADENE TOT. IN BOT. MATL. (UG/L)
JUN 1988 20...	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.2
ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- ANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- ELDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
DATE	ALDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	CHLOR- ANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDD, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DDT, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	DI- AZINON, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)	PCB, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)
JUN 1988 20...	<10	<10	<10	<10	<10	<10	<10	<10
HEPTA- CHLOR EPOXIDE	HEPTA- CHLOR, TOTAL TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL TOT. IN BOTTOM MATL. (UG/KG)	MALA- THION, TOTAL TOT. IN BOTTOM MATL. (UG/KG)	METH- OXY- CHLOR, TOTAL TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL TOT. IN BOTTOM MATL. (UG/KG)	TOXA- PHENE, TOTAL TOT. IN BOTTOM MATL. (UG/KG)
DATE	HEPTA- CHLOR EPOXIDE TOTAL TOT. IN BOTTOM MATL. (UG/KG)	HEPTA- CHLOR, TOTAL TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL TOT. IN BOTTOM MATL. (UG/KG)	MALA- THION, TOTAL TOT. IN BOTTOM MATL. (UG/KG)	METHYL TRI- THION, TOTAL TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL TOT. IN BOTTOM MATL. (UG/KG)	PARA- THION, TOTAL TOT. IN BOTTOM MATL. (UG/KG)	TOXA- PHENE, TOTAL TOT. IN BOTTOM MATL. (UG/KG)
JUN 1988 20...	<10	<10	<10	<10	<10	<10	<10	<10
301230093181300 - BAYOU D'INDE 0.25 MILE ABOVE INDUSTRIAL OUTFALL CANAL								
SPECIFIC CON- DUCT- ANCE	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, WATER (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)
DATE	TIME							
JUN 1988 20...	1220	21900	7.30	29.5	4.2	160	440	0.5

TABLE 18.-CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

SOLIDS, RESIDUE AT 180	NITRO- GEN, NITRATE NO <sub>2</sub> +NO <sub>3</sub>	NITRO- GEN, AMMONIA + MONIA *	NITRO- GEN, AM- MONIA *	PHOS- PHOROUS DIS- ORGANIC	CADMIUM TOTAL	CADMIUM FM BOT- DIS- SOLVED	CADMIUM TOTAL	CADMIUM FM BOT- DIS- SOLVED	CADMIUM TOTAL	CADMIUM FM BOT- DIS- SOLVED	CADMIUM TOTAL	CADMIUM FM BOT- DIS- SOLVED
SILICA, DIS- SOLVED (MG/L)	DEG. C DIS- SOLVED (MG/L)	DIS- SOLVED (MG/L) AS N)	DIS- SOLVED (MG/L) AS N)	DIS- SOLVED (MG/L) AS N)	MONIA + SOLVED (MG/L) AS N)	MONIA + SOLVED (MG/L) AS N)	MONIA + SOLVED (MG/L) AS N)	MONIA + SOLVED (MG/L) AS N)	MONIA + SOLVED (MG/L) AS N)	MONIA + SOLVED (MG/L) AS N)	MONIA + SOLVED (MG/L) AS N)	MONIA + SOLVED (MG/L) AS N)
DATE JUN 1988 20... .	10	<0.01	<0.02	0.05	0.38	0.09	<1	<1	<1	<1	<1	<1
CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	IRON, TOTAL DIS- SOLVED TERIAL (UG/L) AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G) AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G) AS PB)	IRON, RECOV. TOTAL DIS- SOLVED TERIAL (UG/G) AS FE)	LEAD, FM BOT- TOM MA- TERIAL (UG/G) AS PB)	LEAD, FM BOT- TOM MA- TERIAL (UG/G) AS PB)	LEAD, FM BOT- TOM MA- TERIAL (UG/G) AS PB)	LEAD, FM BOT- TOM MA- TERIAL (UG/G) AS PB)	LEAD, FM BOT- TOM MA- TERIAL (UG/G) AS MN)	LEAD, FM BOT- TOM MA- TERIAL (UG/G) AS HG)	MANGA- NESE, TOTAL DIS- SOLVED TERIAL (UG/G) AS MN)	
DATE JUN 1988 20... .	20	390	40	3400	7	5	30	210	80	64	<0.1	0.1
MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G) AS HG)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (GM/KG) AS C)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	CARBON- TETRA- CHLORO- ETHANE TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	CHLORO- METHANE TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	CHLORO- METHANE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	ACE- NAPHTH- YLENE
DATE JUN 1988 20... .	2.7	2.6	60	1.4	<0.2	2.4	73	6.6	3.2	<0.2	<0.2	<5.0
ACE- NAPHTH- YLENE	ACE- NAPHTH- ENONE TOTAL (UG/KG)	ACRO- LEIN BOT.MAT (UG/KG)	ACRYLO- NITRILE BOT.MAT (UG/KG)	ANTHRA- CENE BOT.MAT (UG/L)	ANTHRA- CENE BOT.MAT (UG/KG)	ANTHRA- CENE BOT.MAT (UG/L)	FLUOR- AN- THENE BOT.MAT (UG/L)	BENZENE BOT.MAT (UG/KG)	BENZENE BOT.MAT (UG/L)	BENZO B FLUOR- AN-	BENZO K FLUOR- AN-	ACE- NAPHTH- YLENE
DATE JUN 1988 20... .	<780	<5.0	<780	<1600	<1600	<5.0	<780	<10	<1600	<160	<10	<1600
BENZO- A- PYRENE	BENZO- A- PYRENE TOTAL (UG/L)	2- CHLORO- ETHYL ETHER TOTAL (UG/KG)	BIS (2- CHLORO- ETHYL) ETHER TOTAL (UG/L)	BIS (2- CHLORO- ETHYL) ETHER TOTAL (UG/L)	BIS (2- CHLORO- ETHYL) ETHER TOTAL (UG/KG)	BIS (2- CHLORO- ETHYL) ETHER TOTAL (UG/L)	BIS (2- CHLORO- ETHYL) ETHER TOTAL (UG/KG)	BROMO- FORM TOTAL (UG/L)	BROMO- FORM TOTAL (UG/KG)	N-BUTYL BENZYL PHTHAL- ATE TOTAL (UG/L)	N-BUTYL BENZYL PHTHAL- ATE TOTAL (UG/KG)	BENZO- A- PYRENE
DATE JUN 1988 20... .	<10	<1600	<5.0	<780	<5.0	<780	<5.0	<780	<160	<5.0	<780	<160

DATE	CHLORO-BENZENE TOTAL (UG/L)	CHLORO-BENZENE BOT.MAT (UG/KG)	CHLORO-ETHANE TOTAL (UG/L)	CHLORO-ETHANE BOT.MAT (UG/KG)	CHLORO-FORM TOTAL (UG/L)	CHLORO-FORM BOT.MAT (UG/KG)	CHRY-SENE TOTAL (UG/L)	CHRY-SENE BOT.MAT (UG/KG)	BROMO-DI-CHLORO-PHTHALATE TOTAL (UG/L)	BROMO-DI-CHLORO-PHTHALATE TOTAL (UG/KG)	DI-INDENO-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	DI-INDENO-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/KG)	DI-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)	DI-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/KG)
JUN 1988	<0.2	<160	<160	<0.2	<160	<160	<10	<1600	<160	<5.0	<780	<10	<160	<5.0
20...	<0.2	<160	<160	<5.0	<780	<5.0	<780	<5.0	<780	<5.0	<780	<10	<1600	<5.0
DATE	ISO-BENZENE TOTAL (UG/L)	ETHYL-ANTHENE TOTAL (UG/L)	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	CHRY-SENE TOTAL (UG/L)	CHRY-SENE BOT.MAT (UG/L)	DI-INDENO-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	DI-INDENO-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	DI-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)	DI-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)	DI-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)	DI-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)
JUN 1988	<5.0	<160	<160	<5.0	<780	<5.0	<780	<5.0	<780	<5.0	<780	<10	<1600	<5.0
20...	N-NITRO-PHORONE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	ISO-BORONNE TOTAL (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	METHYL-BRIDE TOTAL (UG/L)	METHYL-BRIDE TOTAL (UG/L)	METHYL-BRIDE TOTAL (UG/L)	METHYL-BRIDE TOTAL (UG/L)	METHYL-CHLORIDE TOTAL (UG/L)	METHYL-CHLORIDE TOTAL (UG/L)	METHYLENE TOTAL (UG/L)	METHYLENE TOTAL (UG/L)	METHYLENE TOTAL (UG/L)	METHYLENE TOTAL (UG/L)
DATE	N-NITRO-LAMINE BOT.MAT (UG/KG)	METHYL-LAMINE BOT.MAT (UG/KG)	NAPHTH-ALENE BOT.MAT (UG/KG)	NAPHTH-ALENE BOT.MAT (UG/L)	NITRO-BENZENE TOTAL (UG/L)	NITRO-BENZENE TOTAL (UG/L)	NITRO-BENZENE TOTAL (UG/L)	NITRO-BENZENE TOTAL (UG/L)	CRESOL TOTAL (UG/L)	CRESOL TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)
JUN 1988	<780	<780	<780	<780	<160	<0.2	<160	<0.2	<160	<0.4	<4700	<30	<780	<5.0
20...	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	VINYL-CHLORO-ETHANE TOTAL (UG/L)	VINYL-CHLORO-ETHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)
DATE	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE BOT.MAT (UG/KG)	TOLUENE BOT.MAT (UG/L)	METHANE TOTAL (UG/L)	METHANE TOTAL (UG/L)	METHANE TOTAL (UG/L)	METHANE TOTAL (UG/L)	ETHANE TOTAL (UG/L)	ETHANE TOTAL (UG/L)	ETHANE TOTAL (UG/L)	ETHANE TOTAL (UG/L)	ETHANE TOTAL (UG/L)	ETHANE TOTAL (UG/L)
JUN 1988	5.2	<160	<31	<160	<0.2	<160	<160	<160	<160	<0.2	<160	<0.2	<160	<0.2
20...														

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

					BENZOGH	BENZO A	BENZO A
					PERYL	ANTHRAC	ANTHRAC
1,1,1- TRI- CHLORO- ETHANE	1,1,1- TRI- CHLORO- ETHANE	1,1,2- CHLORO- ETHANE	1,1,2- CHLORO- ETHANE	1,1,2,2 TOTAL	1,1,2,2 -TETRA- CHLORO- ETHANE	ENE1,12 -BENZOP	ENE1,2- BENZANT
DATE JUN 1988 20...	DATE JUN 1988 20...	BOT.MAT (UG/L)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)
		0.6	<160	0.9	<160	1.1	<160
						<10	<1600
						<5.0	<780
						<10	<160
1,2-DI- CHLORO- BENZENE	1,2-DI- CHLORO- BENZENE	1,2-DI- CHLORO- PROPANE	1,2-DI- CHLORO- ETHENE	1,2-TRA- NS-DI- CHLORO- ETHENE	1,2,4- TRI- CHLORO- ETHENE	1,2,5,6 -DIBENZ -ANTHRA	1,2,5,6 -DIBENZ -ANTHRA
DATE JUN 1988 20...	DATE JUN 1988 20...	TOTAL (UG/L)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)
		<0.2	<780	<0.2	<160	<0.2	<160
						<5.0	<780
						<10	<1600
						<5.0	<160
1,3-DI- CHLORO- BENZENE	1,3-DI- CHLORO- BENZENE	1,4-DI- CHLORO- BENZENE	1,4-DI- CHLORO- BENZENE	CHLORO- ETHYL- VINY- L- ESTER	CHLORO- NAPH- THALENE	CHLORO- PHENOL	CHLORO- PHENOL
DATE JUN 1988 20...	DATE JUN 1988 20...	TOTAL (UG/L)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)
		<0.2	<780	<0.2	<780	<10	<160
						<5.0	<780
						<5.0	<780
2-NITRO- PHENOL	2-NITRO- PHENOL	DI-N- OCTYL PHTHAL- ATE	2,4-DI- CHLORO- PHENOL	2,4-DI- METHYL- PHENOL	2,4-DI- METHYL- PHENOL	2,4-DI- TOLUENE	2,4-DI- TOLUENE
DATE JUN 1988 20...	DATE JUN 1988 20...	TOTAL (UG/L)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/L)	TOTAL (UG/L)
		<780	<10	<1600	<5.0	<780	<5.0
						<780	<780
						<5.0	<780
2,4,6- TRI- CHLORO- PHENOL	2,4,6- TRI- CHLORO- PHENOL	3,3'- DI- CHLORO- BENZI- DINE	3,3'- DI- CHLORO- BENZI- DINE	BROMO- PHENYL PHENYL	CHLORO- BENZYL DINE	CHLORO- BENZYL ETHER	CHLORO- BENZYL ETHER
DATE JUN 1988 20...	DATE JUN 1988 20...	TOTAL (UG/L)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)
		<20	<3100	<5.0	<780	<25	<3900
						<5.0	<780
						<5.0	<780
						<10	<30



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

301224093174900 - BAYOU D'INDE 0.25 MILE BELOW INDUSTRIAL OUTFALL CANAL

SPE-CIFIC	PH	TEMPERATURE	OXYGEN, DIS-SOLVED	CALCIUM, DIS-SOLVED	MAGNE-SIUM, DIS-SOLVED	POTAS-SIUM, DIS-SOLVED	CHLO-RIDE, DIS-SOLVED	FLUO-RIDE, DIS-SOLVED
CON-DUCT-	(STAND-ARD UNITS)	WATER (DEG C)	SOLVED (MG/L)	MONIA + ORGANIC DIS-SOLVED	MONIA + ORGANIC DIS-SOLVED	PHOROUS, DIS-SOLVED	TOTAL CADMIUM, RECOV-EARABLE	CHRO-MIUM, TOTAL
DATE	TIME			(AS CA)	(AS MG)	(MG/L AS K)	(MG/L AS SO4) AS CL)	(MG/L AS CR)
JUN 1988	20...	1247	22900	7.60	29.0	5.0	440	4000
SILICA, RESIDUE AT 180	NITRITE	NITRO-GEN, NO2+NO3	AMMONIA + MONIA + ORGANIC DIS-SOLVED	NITRO-GEN, AMMONIA + MONIA + ORGANIC DIS-SOLVED	NITRO-GEN, AMMONIA + MONIA + ORGANIC DIS-SOLVED	CADMIUM, RECOV-EARABLE	CADMIUM, RECOV-EARABLE	CADMIUM, RECOV-EARABLE
DIS-SOLVED (MG/L AS DEG C)	DIS-SOLVED (MG/L AS SOLVED)	DIS-SOLVED (MG/L AS N)	DIS-SOLVED (MG/L AS N)	DIS-SOLVED (MG/L AS N)	DIS-SOLVED (MG/L AS P)	(UG/L AS CD)	(UG/G AS CD)	(UG/L AS CR)
JUN 1988	20...	8.8	13800	<0.01	<0.02	0.04	0.27	0.09
CHRO-MIUM, IRON, TOTAL	IRON, FM BOT-RECOV-ERABLE	IRON, FM BOT-RECOV-ERABLE	IRON, FM BOT-RECOV-ERABLE	IRON, FM BOT-RECOV-ERABLE	IRON, FM BOT-RECOV-ERABLE	LEAD, FM BOT-RECOV-ERABLE	MANGANESE, TOTAL	MERCURY, TOTAL
DATE	TOM MAT-TERIAL (UG/G AS FE)	TOM MAT-TERIAL (UG/L AS FE)	TOM MAT-TERIAL (UG/G AS FE)	TOM MAT-TERIAL (UG/L AS PB)	TOM MAT-TERIAL (UG/L AS PB)	LEAD, FM BOT-RECOV-ERABLE	MANGANESE, TOTAL	MERCURY, TOTAL
JUN 1988	20...	50	260	60	12000	<5	<5	<1
MERCURY RECOV-FM BOT-TOM MAT-TERIAL (UG/G AS HG)	CARBON, ORGANIC TOT. IN BOTTOM MAT.	DI-CHLORO-BROMO-METHANE	CARBON-TETRA-CHLORO-ETHANE	1,2-DI-CHLORO-ETHANE	BROMO-METHANE	CHLORO-METHANE	TOLUENE, TOTAL (UG/L)	ACE-NAPHTH-YLENE, TOTAL (UG/L)
DATE	(MG/L AS C)	(GM/KG AS C)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
JUN 1988	20...	2.8	3.3	84	0.6	<0.2	1.2	35
ACE-NAPHTH-YLENE BOT.MAT (UG/KG)	ACE-NAPHTH-ENE TOTAL (UG/L)	ACRO-LEIN BOT.MAT (UG/KG)	ACRYLO-NITRILLE BOT.MAT (UG/KG)	ANTHRA-CENE TOTAL (UG/L)	ANTHRA-CENE TOTAL (UG/KG)	ANTHRA-CENE TOTAL (UG/L)	BENZENE, TOTAL (UG/KG)	BENZO K FLUOR-AN-THENE, TOTAL (UG/L)
DATE								
JUN 1988	20...	<680	<5.0	<680	<1400	<5.0	<680	<1400
								<1400
								<1400
								<1400

BENZO-A-PYRENE	BENZO-A-PYRENE TOTAL (UG/L)	BIS 2-CHLORO-ETHYL ETHER TOTAL (UG/KG)	BIS (2-CHLORO-ETHOXY) METHANE TOTAL (UG/L)	BIS (2-CHLORO-ETHYL ISO-PROPYL) PROPYL	BIS (2-CHLORO-ETHYL ISO-PROPYL) PROPYL	N-BUTYL BENZYL PHTHALATE	CARBON TETRA-CHLORIDE
DATE	JUN 1988	20...	<10	<1400	<5.0	<680	<5.0
						<680	<140
						<5.0	<680
							<140
CHLOROBENZENE TOTAL (UG/L)	CHLOROBENZENE TOTAL (UG/KG)	DI-BROMO-CHLORO-ETHANE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/KG)	CHLORO-FORM TOTAL (UG/L)	CHRYSENE TOTAL (UG/KG)	DI-ETHYL PHTHALATE	DI-METHYL PHTHALATE
DATE	JUN 1988	20...	<0.2	<140	<0.2	<140	<10
						<1400	<5.0
							<680
							<10
INDENO(1,2,3-CD) PYRENE	INDENO(1,2,3-CD) PYRENE TOTAL (UG/KG)	DI-METHYL-PHTHALATE TOTAL (UG/L)	ISO-METHYL-BROMIDE TOTAL (UG/L)	ISO-METHYL-BROMIDE TOTAL (UG/KG)	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/KG)	HEXA-CHLOROPENT-
DATE	JUN 1988	20...	<680	<0.2	<140	<5.0	ADIENE TOTAL (UG/L)
						<680	ETHANE TOTAL (UG/L)
							BOT.MAT TOTAL (UG/L)
							BOT.MAT TOTAL (UG/L)
							BOT.MAT TOTAL (UG/L)
N-NITRO-SODI-PHENYL-LAMINE BOT.MAT (UG/KG)	N-NITRO-SODI-PHENYL-LAMINE ALENE BOT.MAT (UG/KG)	NAPHTH-ALENE TOTAL (UG/L)	NITRO-BENZENE TOTAL (UG/KG)	NITRO-BENZENE TOTAL (UG/L)	METHYL-CHLORIDE TOTAL (UG/L)	METHYL-CHLORIDE TOTAL (UG/KG)	N-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)
DATE	JUN 1988	20...	<680	<680	<5.0	<680	ETHANE TOTAL (UG/L)
						<30	BOT.MAT TOTAL (UG/L)
						<4100	BOT.MAT TOTAL (UG/L)

TABLE 18.—CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTIDILSSES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988.—CONTINUED

DATE	JUN 1988	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L)		2,4,6-DI-CHLORO-NITRO-TOLUENE TOTAL BOT.MAT (UG/KG)		2,6-DI-CHLORO-NITRO-TOLUENE TOTAL BOT.MAT (UG/L)		3,3'-DI-CHLOROBENZYL DINE TOTAL BOT.MAT (UG/KG)		4-BROMOPHENYL PHENYL ETHER TOTAL BOT.MAT (UG/L)		4-BROMOPHENYL PHENYL ETHER TOTAL BOT.MAT (UG/KG)		4-CHLOROPHENYL PHENYL ETHER TOTAL BOT.MAT (UG/L)		4-CHLOROPHENYL PHENYL ETHER TOTAL BOT.MAT (UG/KG)		PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	
		20...	<20	<2700	<5.0	<680	<25	<3400	<5.0	<680	<5.0	<680	<30	20...	<100	<30	<100	<100	<1000
DATE	JUN 1988	4- <i>N</i> -DINITRO- <i>O</i> -TETRA-CRESOL TOTAL BOT.MAT (UG/KG)		4,6-DINITRO- <i>O</i> -TETRA-CRESOL TOTAL BOT.MAT (UG/L)		4,6-DINITRO- <i>O</i> -TETRA-CRESOL TOTAL BOT.MAT (UG/KG)		AROCLOR 1016 PCB TOTAL (UG/L)		PHENOL (C6H-5OH) TOTAL (UG/L)		PHENOL (C6H-5OH) TOTAL (UG/L)		NAPHTH-ALENE TOTAL (UG/L)		1,3-DI-CHLORO-PROPENE TOTAL (UG/L)		PENTA-CHLOROPHENOL TOTAL (UG/L)	
		20...	<4100	<30	<4100	<0.2	<0.1	<5.0	<680	<5.0	<680	<5.0	<680	<0.2	<0.2	<0.2	<0.2	<30	1,3-DI-CHLORO-PROPENE TOTAL (UG/L)
DATE	JUN 1988	PENTA-CHLORO-PHENOL TOTAL BOT.MAT (UG/KG)		BIS(2-ETHYL-HEXYL) PHTHALATE TOTAL (UG/L)		BIS(2-ETHYL-HEXYL) PHTHALATE TOTAL (UG/L)		DI-N-BUTYL-PHTHALATE TOTAL (UG/L)		BENZI-DINE TOTAL (UG/L)		BENZI-DINE TOTAL (UG/L)		VINYLCHLORIDE TOTAL (UG/L)		TRI-CHLORO-ETHYLENE TOTAL (UG/L)		AROCLO 1221 PCB TOTAL (UG/L)	
		20...	<4100	<0.2	<5.0	<680	<5.0	<680	<5.0	<680	<5.0	<680	<5.0	<680	<0.2	<0.2	<0.2	<0.2	<30
DATE	JUN 1988	AROCLO 1232 PCB TOTAL (UG/L)		AROCLO 1242 PCB TOTAL (UG/L)		AROCLO 1248 PCB TOTAL (UG/L)		AROCLO 1254 PCB TOTAL (UG/L)		HEXA-BENZENE TOTAL (UG/L)		HEXA-BENZENE TOTAL (UG/L)		HEXA-CHLOROBENZENE TOTAL (UG/L)		HEXA-CHLOROBENZENE TOTAL (UG/L)		XYLENE TOTAL WATER WHOLE TOT REC (UG/L)	
		20...	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<680	<5.0	<680	<5.0	<680	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DATE	JUN 1988	ALDRIN, DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)		DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)		DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)		AZINON, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)		ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)		ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)		PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)		PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)		PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	
		20...	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<1000	<1000	<1000

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

	HEPTA-CHLOR-EPOXIDE	LINDANE TOTAL	MALA-THION, TOTAL	METH- OXY-CHLOR-	METHYL TRI- THION,	MIREX, TOTAL	PER- THANE, TOTAL	TOXA- PHENE, TOTAL
DATE	TOTAL IN BOT- TOT. IN BOT-	TOT. IN BOT-	TOT. IN BOT-	TOT. IN BOT-	TOT. IN BOT-	TOT. IN BOT-	TOT. IN BOT-	TRI- THION,
JUN 1988	TOM MA-TERIAL (UG/KG)	TOM MA-TERIAL (UG/KG)	BOTTOM MATL.	BOTTOM MATL.	BOTTOM MATL.	BOTTOM MATL.	BOTTOM MATL.	TOM MA-TERIAL (UG/KG)
20...	<100	<100	<10	<100	<10	<10	<100	<10
3012100931173900 - BAYOU D'INDE 0.5 MILE ABOVE MOUTH								
	SPE-CIFIC CON-DUCT-ANCE (US/cm)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS F)
JUN 1988	20...	1305	22100	7.60	29.5	4.8	4.40	4.000
	SILICA, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L AS SI02)	NITRO-GEN, NITRITE NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + MONIA + DIS-ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + MONIA + DIS-ORGANIC DIS-SOLVED (MG/L AS N)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS P)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM FM BOT-TOM MA-TERIAL (UG/G AS CD)	CADMIUM MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
JUN 1988	20...	8.1	13500	<0.01	<0.02	0.04	0.28	0.07
	CHRO-MIUM, IRON, TOTAL RECOV-ERABLE (UG/G AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	IRON, RECOV-ERABLE (UG/G AS FE)	IRON, RECOV-ERABLE (UG/L AS PB)	LEAD, FM BOT-TOM MA-TERIAL (UG/L AS PB)	LEAD, FM BOT-TOM MA-TERIAL (UG/L AS MN)	MANGANESE, FM BOT-TOM MA-TERIAL (UG/L AS HG)	MANGANESE, TOTAL RECOV-ERABLE (UG/L AS HG)
JUN 1988	20...	40	260	60	3500	<5	<5	<1
	MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	DI-TOT. IN BOTTOM MAT. (GM/KG AS C)	CARBON-TETRA-BROMO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	BROMO-ETHANE TOTAL (UG/L)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L)	CHLORO-NAPHTH-YLENE TOTAL (UG/L)
JUN 1988	20...	6.3	2.8	86	0.5	<0.2	0.9	18
								0.1



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

	N-NITRO -SODI- PHENY- LAMINE TOTAL (UG/L)	N-NITRO -SODI- METHY- LAMINE BOT. MAT (UG/KG)	NAPHTH- -ALENE BOT. MAT (UG/KG)	NITRO- BENZENE TOTAL (UG/L)	NITRO- BENZENE BOT. MAT (UG/KG)	CRESOL TOTAL (UG/L)	CRESOL TOTAL (UG/KG)	PHENAN- THRENE TOTAL (UG/L)	PHENAN- THRENE TOTAL (UG/KG)	PARA- CHLORO- META BOT. MAT (UG/KG)	PARA- CHLORO- CHLORO- FLUORO- IDE BOT. MAT (UG/KG)	VINYL CHLORO- FLUORO- METHANE TOTAL (UG/L)	VINYL CHLORO- FLUORO- METHANE TOTAL (UG/KG)	1,1-DI- CHLORO- CHLORO- ETHYL- ENE TOTAL (UG/KG)	1,1-DI- CHLORO- CHLORO- ETHYL- ENE TOTAL (UG/L)
JUN 1988 20...	<5.0	<620	<620	<5.0	<620	<30	<30	3800	<5.0	2600	<5.0				
		TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/KG)	TRI- CHLORO- ETHYL- ENE BOT. MAT (UG/KG)	TRI- CHLORO- ETHYL- ENE BOT. MAT (UG/L)	CHLORO- FLUORO- METHANE TOTAL (UG/L)	CHLORO- FLUORO- METHANE TOTAL (UG/KG)	CHLORO- FLUORO- METHANE TOTAL (UG/L)	CHLORO- FLUORO- METHANE TOTAL (UG/KG)	CHLORO- FLUORO- METHANE TOTAL (UG/L)	CHLORO- FLUORO- METHANE TOTAL (UG/L)	1,1-DI- CHLORO- CHLORO- ETHYL- ENE TOTAL (UG/L)	1,1-DI- CHLORO- CHLORO- ETHYL- ENE TOTAL (UG/L)		
JUN 1988 20...	<620	1.9	<140	<25	<140	<0.2	<140	<140	<0.2	<140	<0.2	<140	<0.2	<0.2	
		1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/KG)	1,1,1- TRI- CHLORO- ENE ETHANE TOTAL BOT. MAT (UG/L)	1,1,1- TRI- CHLORO- ENE ETHANE TOTAL BOT. MAT (UG/KG)	1,1,1- TRI- CHLORO- ENE ETHANE TOTAL BOT. MAT (UG/L)	1,1,2- CHLORO- ETHANE TOTAL BOT. MAT (UG/L)	1,1-DI- CHLORO- CHLORO- ETHYL- ENE TOTAL (UG/L)	1,1-DI- CHLORO- CHLORO- ETHYL- ENE TOTAL (UG/L)							
JUN 1988 20...	<140	0.3	4900	<0.2	<140	0.3	<140	<10	<10	<1200	<5.0	1700			
		1,2-DI- CHLORO- ETHANE TOTAL (UG/KG)	1,2-DI- CHLORO- BENZENE TOTAL (UG/L)	1,2-DI- CHLORO- BENZENE TOTAL BOT. MAT (UG/KG)	1,2-DI- CHLORO- BENZENE TOTAL BOT. MAT (UG/L)	PROPANE TOTAL BOT. MAT (UG/L)	PROPANE TOTAL BOT. MAT (UG/L)	BENZENE TOTAL BOT. MAT (UG/L)	BENZENE TOTAL BOT. MAT (UG/L)	BENZENE TOTAL BOT. MAT (UG/L)	BENZENE TOTAL BOT. MAT (UG/L)	1,2-4- NS-DI- CHLORO- ETHENE TOTAL BOT. MAT (UG/L)	1,2-4- NS-DI- CHLORO- ETHENE TOTAL BOT. MAT (UG/L)		
JUN 1988 20...	<140	<0.2	2300	<0.2	<140	460	<5.0	<620	<10	<1200	<0.2	<0.2			
		1,3-DI- CHLORO- BENZENE TOTAL (UG/L)	1,4-DI- CHLORO- BENZENE TOTAL (UG/KG)	2-	2-	CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)	CHLORO- NAPH- ETHER TOTAL (UG/L)	CHLORO- NAPH- ETHER TOTAL (UG/L)	CHLORO- NAPH- ETHER TOTAL (UG/L)	CHLORO- NAPH- ETHER TOTAL (UG/L)	2-	2-	2-	
JUN 1988 20...	<0.2	<620	<0.2	<620	<10	<140	<5.0	<620	<5.0	<620	<5.0	<0.2			

		DL-N-OCTYL PHTHAL-ATE TOTAL (UG/KG)	DL-N-CHLORO-PHTHAL-ATE BOT.MAT (UG/KG)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L)	2,4-DI-CHLORO-PHENOL BOT.MAT (UG/KG)	2,4-DI-METHYL-PHENOL TOTAL (UG/L)	2,4-DI-METHYL-PHENOL IN BOTTOM MAT. (UG/KG)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE BOT.MAT (UG/KG)	2,4-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-PHENOL BOT.MAT (UG/KG)
DATE	JUN 1988	<620	<10	<1200	<5.0	<620	<5.0	<620	<5.0	<620	<20
											<2500
DATE	JUN 1988	<20...	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L)	2,6-DI-NITRO-TOLUENE TOTAL (UG/KG)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L)	3,3'-DI-CHLOROBENZI-DINE TOTAL (UG/L)	3,3'-DI-CHLOROBENZI-DINE TOTAL (UG/L)	BROMOPHENYL TOTAL (UG/KG)	BROMOPHENYL TOTAL (UG/L)	CHLOROPHENYL TOTAL (UG/L)	CHLOROPHENYL TOTAL (UG/L)
											4-
DATE	JUN 1988	<20...	4,6-DINITRO-ORTHOCRESOL TOTAL (UG/KG)	4,6-DINITRO-ORTHOCRESOL TOTAL (UG/L)	4,6-DINITRO-ORTHOCRESOL TOTAL (UG/KG)	AROCLO 1016 PCB TOTAL (UG/L)	AROCLO 1016 PCB TOTAL (UG/L)	PHENOL (C6H-5OH) TOTAL (UG/L)	PHENOL (C6H-5OH) TOTAL (UG/L)	NAPHTHALENE TOTAL (UG/L)	NAPHTHALENE TOTAL (UG/L)
											CIS
DATE	JUN 1988	<3800	<30	<3800	<0.2	<0.1	<5.0	<620	<5.0	<620	<0.2
											<30
DATE	JUN 1988	<3800	1,2-DIBROMOETHYL-ENE TOTAL (UG/KG)	1,2-DIBROMOETHYL-ENE TOTAL (UG/L)	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	DI-N-BUTYL-PHTHALATE TOTAL (UG/KG)	DI-N-BUTYL-PHTHALATE TOTAL (UG/L)	BENZIDINE TOTAL (UG/KG)	BENZIDINE TOTAL (UG/L)	VINYLCHLORIDE TOTAL (UG/L)	TRICHLOROETHYLENE TOTAL (UG/L)
											AROCLOR
DATE	JUN 1988	<0.1	<0.1	<0.1	<0.1	<620	<5.0	<620	<50	<6200	<0.2
											<0.1
DATE	JUN 1988	1232	PCB TOTAL (UG/L)	AROCLO 1248 PCB TOTAL (UG/L)	AROCLO 1254 PCB TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	XYLENE TOTAL (UG/L)
											TOTAL WATER WHOLE TOT REC (UG/L)
											ADIDENE TOTAL (UG/L)
											STYRENE TOTAL (UG/L)
											TOXIC TOTAL (UG/L)

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

CHRO-MIUM,	IRON, TOTAL	IRON, DIS-SOLVED	IRON, RECOV.	LEAD, TOTAL	LEAD, FM BOT-TOTAL	LEAD, FM BOT-TOTAL	LEAD, FM BOT-TOTAL	MANGANESE, TOTAL	MANGANESE, TOTAL	MANGANESE, TOTAL
FM BOT-RECOV.	TOM MA-TERIAL (UG/L AS FE)	TOM MA-TERIAL (UG/L AS FE)	TOM MA-TERIAL (UG/G AS FE)	TOM MA-TERIAL (UG/G AS FE)	TOM MA-TERIAL (UG/L AS PB)	TOM MA-TERIAL (UG/G AS PB)	TOM MA-TERIAL (UG/L AS MN)			
DATE JUN 1988	20...	20	300	50	3300	<5	5	50	140	20
									58	<0.1
										<0.1
MERCURY RECOV.	CARBON-ORGANIC	CARBON-ORGANIC	DI-CHLORO-BOTTOM	CARBON-TETRA-CHLORO-CHLORO-	1,2-DI-CHLORO-CHLORO-	BROMO-ETHANE FORM	METHANE FORM	TOLUENE TOTAL	BENZENE TOTAL	MERCURY RECOV.
FM BOT-TOTAL	TOT. IN MAT.	TOT. IN MAT.	BROMO-METHANE	CHLORO-RIDE	CHLORO-ETHANE	FORM TOTAL	FORM TOTAL	TOtal	TOtal	FM BOT-TOTAL
TOM MA-TERIAL (UG/G AS HG)	(GM/KG AS C)	(GM/KG AS C)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
DATE JUN 1988	20...	2.1	2.8	64	0.5	<0.2	1.0	34	2.7	<0.2
										<5.0
ACE-NAPHTH-YLENE	ACE-NAPHTH-ENE	ACE-NAPHTH-ENE	ACRO-LEIN	ACRYLO-NITRILE	ANTHRA-CENE	ANTHRA-CENE	THEENE	BENZENE	BENZENE	ACE-NAPHTH-YLENE
BOT.MAT TOTAL (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)
DATE JUN 1988	20...	<660	<5.0	<660	<1300	<1300	<5.0	<660	<10	<1300
										<130
										<130
BENZO-A-PYRENE	BENZO-A-PYRENE	BENZO-A-ETHER	BIS-CHLORO-ETHYL	BIS-(2-CHLORO-ETHYL)	BIS-(2-CHLORO-ETHOXY)	BIS-(2-CHLORO-ETHOXY)	BIS-(2-CHLORO-ISO-PROPYL)	BIS-(2-CHLORO-ISO-PROPYL)	N-BUTYL BENZYL	CARBON TETRA-CHLOR-IDENE
TOTAL (UG/L)	TOTAL (UG/KG)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	ETHER	ETHER	PHTHALATE	PHTHALATE
DATE JUN 1988	20...	<10	<1300	<5.0	<660	<5.0	<660	<5.0	<660	<660
										<130
CHLOROBENZENE	CHLOROBENZENE	CHLOROBENZENE	CHLORO-CHLORO-	CHLORO-ETHANE	CHLORO-ETHANE	CHLORO-ETHANE	CHRY-SENE	CHRY-SENE	DIEETHYL PHTHALATE	DI-METHYL PHTHALATE
TOTAL (UG/L)	TOTAL (UG/KG)	TOTAL (UG/L)	METHANE	BOT.MAT (UG/KG)	BOT.MAT (UG/L)					
DATE JUN 1988	20...	<0.2	<130	<130	<0.2	<130	<10	<1300	<5.0	<660
										<5.0

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

			1,2-DI-CHLOROBENZENE	1,2-DI-CHLOROPROpane	1,2-DI-CHLOROBENZENE	1,2-DI-CHLOROETHENE	1,2-TRANSDI-CHLORO-ETHENE	1,2-TRI-CHLORO-BENZENE	1,2,4-ANTHRA-CHLOROPROPENE	1,2,5,6-DIBENZ-ANTHRA-CHLOROPROPENE	1,3-DI-CHLOROPHENOL
DATE	JUN 1988	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)
JUN 1988	<0.2	3800	<0.2	<130	<0.2	<130	<130	<5.0	1400	<10	<1300
20...											<0.2
1,3-DI-CHLOROBENZENE	1,3-DI-CHLOROBENZENE	1,4-DI-CHLOROBENZENE	1,4-DI-CHLOROBENZENE	1,4-DI-CHLOROBENZENE	1,4-DI-CHLOROBENZENE	1,4-DI-CHLOROBENZENE	1,4-DI-CHLOROBENZENE	2-	2-	2-	2-
DATE	JUN 1988	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	2-	CHLORO-NAPHTHALENE	CHLORO-NAPHTHALENE	CHLORO-NAPHTHALENE
JUN 1988	<0.2	<660	<0.2	<660	<10	<130	<130	<5.0	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)
20...											
2-NITRO-PHENOL	DI-N-OCTYL-PHTHALATE	2,4-DI-CHLOROPHENOL	2,4-DI-CHLOROPHENOL	2,4-DI-CHLOROPHENOL	2,4-DI-CHLOROPHENOL	2,4-DI-CHLOROPHENOL	2,4-DI-CHLOROPHENOL	2,4-DI-CHLOROPHENOL	2,4-DI-NITROTOLUENE	2,4-DI-NITROTOLUENE	2,4-DI-NITROTOLUENE
DATE	JUN 1988	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)
JUN 1988	<660	<10	<1300	<5.0	<660	<5.0	<660	<5.0	<660	<660	<20
20...											<2600
2,4,6-TRI-CHLOROPHENOL	2,4,6-TRI-CHLOROPHENOL	2,6-DI-NITROTOLUENE	2,6-DI-NITROTOLUENE	2,6-DI-NITROTOLUENE	2,6-DI-NITROTOLUENE	2,6-DI-NITROTOLUENE	2,6-DI-NITROTOLUENE	3,3'-DI-CHLOROBENZENE	4-BROMOPHENYL	4-BROMOPHENYL	4-BROMOPHENYL
DATE	JUN 1988	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	DINE	PHENYL PHENYL	PHENYL PHENYL	PHENYL PHENYL
JUN 1988	<20	<2600	<5.0	<660	<25	<3300	<3300	<5.0	ETHER ETHER	ETHER ETHER	ETHER ETHER
20...									TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)
4-NITRO-PHENOL	4,6-DINITRO-CRESOL	DI-CHLORODINITRO-CRESOL	DI-CHLORODINITRO-CRESOL	DI-CHLORODINITRO-CRESOL	DI-CHLORODINITRO-CRESOL	DI-CHLORODINITRO-CRESOL	DI-CHLORODINITRO-CRESOL	AROCLOR	PHENOL (C6H-5OH)	NAPHTH-5OH	TRANS-CIS
DATE	JUN 1988	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	PCB TOTAL	BOT.MAT (UG/L)	ALENE TOTAL (UG/L)	1,3-DI-CHLOROPHENOLENE TOTAL (UG/L)
JUN 1988	<3900	<30	<3900	<0.2	<0.1	<5.0	<660	<660	5.0	<0.2	<0.2
20...											<30

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

	BIS (2-ETHYL HEXYL)	BIS (2-DI-N-BUTYL PHthalate)	DIN-BUTYL PHTHALATE	BENZI-DINE BOT. MAT. (UG/KG)	VINYL CHLO-CHLOR-ETHYL-	TRI-CHLORO-ETHYL-	
PENTA-CHLOROPHENOL	1,2-DIBROMO-ETHYL-ENE	PHthalate TOTAL	ATE TOTAL	BOT. MAT. (UG/L)	DINE BOT. MAT. (UG/KG)	ENE TOTAL (UG/L)	
DATE	BOT. MAT. (UG/KG)	(UG/L)	(UG/L)	(UG/L)	(UG/KG)	(UG/L)	
JUN 1988	<3900	<0.2	<52	<660	<5.0	<660	
20...					<50	<6600	
					<0.2	0.5 <0.1	
AROCLOL	AROCLOL	AROCLOL	AROCLOL	HEXA-CHLORO-CHLOR-	HEXA-CHLORO-CHLOR-	XYLENE	
PCB	124.2	124.8	1254	1260	CHLOROBENZENE	CHLOROBENZENE	TOTAL WATER
DATE	TOTAL (UG/L)	TOTAL (UG/L)	PCB TOTAL (UG/L)	PCB TOTAL (UG/L)	TOT. IN BOT. MAT.	BUTADIENE TOTAL (UG/KG)	STYRENE TOTAL (UG/L)
JUN 1988	<0.1	<0.1	<0.1	<0.1	<5.0	27000	<0.2 <0.2
20...							
ALDRIN,	CHLORDANE,	DDD,	DDE,	DI-AZINON,	DI-ENDO-ELDRIN,	PCB, PCN,	
TOTAL	TOTAL	TOTAL	TOTAL	TOTAL	SULFAN, ENDRIN,	TOTAL TOTAL	
IN BOT-	IN BOT-	IN BOT-	IN BOT-	IN BOT-	TOTAL, IN BOT-	IN BOT-	
TOM MA-	TOM MA-	TOM MA-	TOM MA-	TOM MA-	TOM MA-	TOM MA-	
TERIAL	TERIAL	TERIAL	TERIAL	TERIAL	TERIAL	TERIAL	
(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	
JUN 1988	190	<100	<100	<100	<10	<100	<100 <1000 <1000
20...							
HEPTACHLOR,	HEPTACHLOR,	MALATHION,	METHYL OXY-CHLOR,	TRI-CHLOR., THION,	MIREX, THION,	TOXA-PHENETHION,	
EPOXIDE	TOTAL	TOTAL	TOTAL	TOT. IN BOT-	TOTAL, IN BOT-	PER-THANE TOTAL	
TOT. IN	IN BOT-	IN BOT-	IN BOT-	TOM MA-	TOM MA-	IN BOT-	
BOTTOM	TOM MA-	TOM MA-	TOM MA-	BOTTOM	TOP. IN BOT-	TOM MA-	
MATL.	TERIAL	TERIAL	TERIAL	MATL.	BOTTOM	TERIAL	
(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	
JUN 1988	<100	<100	<100	<100	<10	<100	<100 <1000 <1000
20...							
301150093171600	-- CALCASIEU RIVER AT BAYOU D'INDE 2.8 MILES SOUTHEAST OF HOLLYWOOD, LOUISIANA						
SPECIFIC CONDUCTANCE	PH (STAND-ARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN DIS-SOLVED (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS MG)	MAGNESIUM DIS-SOLVED (MG/L AS K)	SODIUM DIS-SOLVED (MG/L AS SO4)	CHLO-FLUO-
DATE	TIME (US/CM)						RIDE, RIDE, DIS- DIS- SOLVED (MG/L AS F)
JUN 1988	28700	7.70	28.5	3.8	240	760	69000 250 1700 12000 0.8
20...							

SOLIDS, RESIDUE AT 180	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub>	NITRO- GEN, AMMONIA	NITRO- GEN, AM- MONIA + ORGANIC	CADMIUM TOTAL	CADMIUM TOTAL	CADMIUM TOTAL	CADMIUM TOTAL
SILICA, DIS- SOLVED (MG/L)	NITRITE DIS- SOLVED (MG/L AS SI02)	DIS- SOLVED (MG/L AS N)	DIS- SOLVED (MG/L AS N)	DIS- SOLVED (MG/L AS P)	DIS- SOLVED (MG/L AS MN)	DIS- SOLVED (UG/L AS CD)	DIS- SOLVED (UG/L AS CR)
DATE JUN 1988 20...	4.1	23300	0.01	0.03	0.31	0.57	0.11
CHRO- MIUM, RECOV. FM BOT- RECOV- ERABLE TOM MA- TERIAL (UG/G) AS HG)	IRON, TOTAL, DIS- SOLVED (UG/L AS FE)	IRON, DIS- SOLVED (UG/G AS PB)	IRON, RECOV., FM BOT- TOM MA- TERIAL (UG/G AS FE)	LEAD, TOTAL, RECOV- ERABLE (UG/L AS PB)	LEAD, TOTAL, RECOV- ERABLE (UG/L AS PB)	LEAD, TOTAL, RECOV- ERABLE (UG/L AS MN)	LEAD, TOTAL, RECOV- ERABLE (UG/G AS HG)
DATE JUN 1988 20...	50	540	120	13000	<5	<5	50
MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	CARBON, ORGANIC TOT. IN BOTTOM MAT. (GM/KG AS C)	CARBON, DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	BROMO- FORM TOTAL (UG/L)	CHLORO- FORM TOTAL (UG/L)	MANGA- NESE, TOTAL, RECOV- ERABLE (UG/L AS HG)
DATE JUN 1988 20...	1.5	1.7	100	0.4	<0.2	0.8	22
ACE- NAPHTH- YLENE	ACE- NAPHTH- ENE	ACRO- LEIN	ACRYLO- NITRILE	ANTHRA- CENE	ANTHRA- CENE	TOLUENE	MANGA- NESE, TOTAL, RECOV- ERABLE (UG/L AS HG)
DATE JUN 1988 20...	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
	<1000	<5.0	<1000	<2000	<5.0	<1000	<10
BENZO- A- PYRENE	BENZO- A- PYRENE	BIS 2- CHLORO- ETHER	BIS (2- CHLORO- ETHYL)	BIS (2- CHLORO- ETHOXY)	BIS (2- CHLORO- ISO- PROPYL)	BIS (2- CHLORO- PHTHAL- ETHER)	BENZO K FLUOR- AN- THENE
DATE JUN 1988 20...	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BENZO K FLUOR- AN- THENE

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

DATE	BOT. MAT (UG/KG)	(UG/L)	BROMO-	CHLORO-	CHLORO-	CHLORO-	CHRY-	CHRY-	BROMO-	DI-	DIETHYL	DIETHYL	DI-
			CHLORO-	CHLORO-	CHLORO-	SENE	SENE	SENE	CHLORO-	PHTHAL-	PHTHAL-	PHTHAL-	METHYL
JUN 1988	20...	<0.2	<200	<200	<0.2	<200	<200	<10	<2000	<200	<5.0	<1000	<5.0
			CHLORO-	CHLORO-	CHLORO-	ETHANE	ETHANE	TOTAL	BOT. MAT	ATE	ATE	ATE	PHTHAL-
DATE	BOT. MAT (UG/KG)	(UG/L)	METHANE	METHANE	TOTAL	BOT. MAT	TOTAL						
			(UG/KG)	(UG/L)	(UG/KG)	(UG/KG)	(UG/L)	(UG/KG)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)
JUN 1988	20...	<1000	<0.2	<200	<5.0	<1000	<5.0	<1000	<5.0	<1000	<5.0	<1000	<10
			INDENO	ETHYL-	FLUOR-	ANTHENE	FLUOR-	ENE	FLUOR-	CYCLO-	CHLORO-	HEXA-	INDENO
DATE	BOT. MAT (UG/KG)	(UG/L)	PHENYL-	ISO-	PHORONE	TOTAL	BOT. MAT	TOTAL	BOT. MAT	PENT-	CHLORO-	HEXA-	(1,2,3-
			ATE	BENZENE	BENZENE	BOT. MAT	BOT. MAT	BOT. MAT	BOT. MAT	ADIENE	ADIENE	ETHANE	CD)
JUN 1988	20...	<2000	<2000	<200	<5.0	<1000	<5.0	<1000	<5.0	TOTAL	BOT. MAT	TOTAL	PYRENE
			INDENO	ISO-	METHYL-	PHORONE	BROMIDE	RIDE	ADENE	BOT. MAT	BOT. MAT	BOT. MAT	PYRENE
DATE	BOT. MAT (UG/KG)	(UG/L)	PHORONE	BROMIDE	TOTAL	BOT. MAT	TOTAL	TOTAL	TOTAL	BOT. MAT	TOTAL	BOT. MAT	TOTAL
			(UG/L)	(UG/L)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)	(UG/L)
JUN 1988	20...	<2000	<5.0	<0.2	<1000	<200	<0.2	<200	<0.2	<200	<5.0	<5.0	<1000
			N-NITRO	N-NITRO	N-NITRO	-SODI-	NAPHTH-	NITRO-	NITRO-	CHLORO-	CHLORO-	PARA-	N-
DATE	BOT. MAT (UG/L)	(UG/L)	-SODI-	-SODI-	-SODI-	PHENY-	PHENY-	BENZENE	BENZENE	META	META	PHENAN-	NITRO-
			LAMINE	LAMINE	LAMINE	METHY-	METHY-	TOTAL	BOT. MAT	CRESOL	CRESOL	THRENE	SODI-N-
JUN 1988	20...	<5.0	<1000	<1000	<1000	TOTAL	BOT. MAT	TOTAL	BOT. MAT	TOTAL	BOT. MAT	TOTAL	PROPYL-
			(UG/KG)	(UG/KG)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	AMINE
DATE	BOT. MAT (UG/KG)	(UG/L)	TETRA-	TETRA-	TETRA-	CHLORO-	CHLORO-	VINYL	CHLORO-	CHLORO-	CHLORO-	CHLORO-	1,1-DI-
			CHLORO-	CHLORO-	CHLORO-	ETHYL-	ETHYL-	FLUORO-	FLUORO-	FLUORO-	FLUORO-	FLUORO-	CHLORO-
JUN 1988	20...	<1000	ETHYL-	ETHYL-	ETHYL-	ENE	ENE	METHANE	METHANE	METHANE	METHANE	METHANE	ETHYL-
			ENE	ENE	ENE	TOLUENE	TOLUENE	TOTAL	BOT. MAT	TOTAL	BOT. MAT	BOT. MAT	ENE
DATE	BOT. MAT (UG/KG)	(UG/L)	TOTAL	BOT. MAT	TOTAL								
			(UG/KG)	(UG/KG)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)

	BENZO A ANTHRAC	BENZOGH BENZO A ANTHRAC	BENZOGH BENZO A ANTHRAC	BENZOGH BENZO A ANTHRAC	BENZOGH BENZO A ANTHRAC
1,1-DI-CHLORO-ETHY-LENE BOT. MAT (UG/KG)	1,1,1-TRI-CHLORO-Ethane TOTAL (UG/L)	1,1,1-TRI-CHLORO-Ethane BOT. MAT (UG/KG)	1,1,2-TRI-CHLORO-Ethane TOTAL (UG/L)	1,1,2-TRI-CHLORO-Ethane BOT. MAT (UG/KG)	1,1,2-TRI-CHLORO-Ethane TOTAL (UG/L)
JUN 1988 20...	<200	<0.2	<200	<0.2	<200
DATE	DATE	DATE	DATE	DATE	DATE
1,2-DI-CHLORO-Ethane BOT. MAT (UG/KG)	1,2-DI-CHLORO-BENZENE TOTAL (UG/L)	1,2-DI-CHLORO-BENZENE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHENE TOTAL (UG/L)	1,2-TRI-CHLORO-ETHENE TOTAL (UG/L)
JUN 1988 20...	<200	<0.2	<1000	<0.2	<200
DATE	DATE	DATE	DATE	DATE	DATE
1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	1,3-DI-CHLORO-BENZENE TOTAL (UG/L)	1,3-DI-CHLORO-BENZENE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)
JUN 1988 20...	<0.2	<0.2	<1000	<0.2	<1000
DATE	DATE	DATE	DATE	DATE	DATE
2-NITRO-PHENOL TOTAL (UG/L)	2-NITRO-PHTHAL-ATE TOTAL (UG/L)	DI-N-OCTYL-PHTHAL-ATE TOTAL (UG/L)	2,4-DI-CHLOROPHENOL TOTAL (UG/L)	2,4-DI-CHLOROPHENOL TOTAL (UG/L)	3,3'-DI-CHLOROBENZIDINE TOTAL (UG/L)
JUN 1988 20...	<5.0	<1000	76	<2000	<5.0
DATE	DATE	DATE	DATE	DATE	DATE
2,4-DI-NITRO-PHENOL BOT. MAT (UG/KG)	2,4,6-TRI-CHLOROPHENOL TOTAL (UG/L)	2,4,6-TRI-CHLOROPHENOL TOTAL (UG/L)	2,6-DI-NITROTOLUENE TOTAL (UG/L)	2,6-DI-NITROTOLUENE TOTAL (UG/L)	3,3'-DI-CHLOROBENZIDINE TOTAL (UG/L)
JUN 1988 20...	<4000	<20	<4000	<5.0	<1000
DATE	DATE	DATE	DATE	DATE	DATE

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

		DI-										CIS														
		4,6-DINITRO- DINITRO- -ORTHO-CRESOL PHENOL TOTAL BOT.MAT (UG/L)					4,6-DINITRO- -ORTHO-CRESOL TOTAL BOT.MAT (UG/KG)					AROCLOR PCB TOTAL (UG/L)					PHENOL (C6H- 5OH) TOTAL (UG/L)					1,3-DI- CHLORO- PROPENE TOTAL (UG/L)				
DATE	JUN 1988	<30					<30					<6000					<0.1					<5.0				
DATE	JUN 1988	<30					<6000					<0.2					<0.1					<1000				
20...							BIS(2- 1,2- DIBROMO- ETHYL- ENE TOTAL (UG/L)					BIS(2- ETHYL HEXYL) PHTHAL- ATE TOTAL (UG/L)					DI-N- BUTYL PHTHAL- ATE TOTAL (UG/KG)					DI-N- BUTYL PHTHAL- ATE TOTAL (UG/L)				
DATE	JUN 1988	<30					<6000					<0.2					<25					<5.0				
20...																	HEXA- CHLORO- BENZENE TOT. IN BOT. MATL. (UG/L)					HEXA- CHLORO- BENZENE TOT. IN BOT. MATL. (UG/L)				
DATE	JUN 1988	<0.1					<0.1					<0.1					<0.1					<5.0				
20...																	DI- AZINON, PCB TOTAL (UG/L)					ENDRIN, SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)				
DATE	JUN 1988	<0.1															DDT, PCB TOTAL (UG/L)					ENDRIN, SULFAN, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)				
20...																	<10					<10				
DATE	JUN 1988	<10					<10					<10					1260 PCB TOTAL (UG/L)					1254 PCB TOTAL (UG/L)				
20...																	HEXA- CHLORO- BENZENE TOT. IN BOT. MATL. (UG/L)					HEXA- CHLORO- BENZENE TOT. IN BOT. MATL. (UG/L)				
DATE	JUN 1988	<10					<10					<10					<10					<10				
20...																	ALDRIN, 1221 PCB TOTAL (UG/L)					DDT, PCB TOTAL (UG/L)				
DATE	JUN 1988	<10					<10					<10					DDD, PCB TOTAL (UG/L)					DDD, PCB TOTAL (UG/L)				
20...																	TOM MA- TERIAL (UG/KG)					TOM MA- TERIAL (UG/KG)				
DATE	JUN 1988	<10					<10					<10					TOM MA- TERIAL (UG/KG)					TOM MA- TERIAL (UG/KG)				
20...																	CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)					CHLOR- DANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)				
DATE	JUN 1988	<10					<10					<10					HEXA- CHLORO- BENZENE TOT. IN BOT. MATL. (UG/L)					HEXA- CHLORO- BENZENE TOT. IN BOT. MATL. (UG/L)				
20...																	ALDRIN, HEPTA- CHLOR- EPOXIDE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)					ALDRIN, HEPTA- CHLOR- EPOXIDE TOTAL IN BOT- TOM MA- TERIAL (UG/KG)				
DATE	JUN 1988	<10					<10					<10					<10					<10				
20...																	LINDANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)					LINDANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)				
DATE	JUN 1988	<10					<10					<10					METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)					METH- OXY- CHLOR, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)				
20...																	TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)					TRI- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)				
DATE	JUN 1988	<10					<10					<10					<10					<10				
20...																	MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)					MIREX, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)				
DATE	JUN 1988	<10					<10					<10					PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)					PARA- THION, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)				
20...																	PER- THANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)					PER- THANE, TOTAL IN BOT- TOM MA- TERIAL (UG/KG)				
DATE	JUN 1988	<10					<10					<10					<10					<10				
20...																	TOM MA- TERIAL (UG/KG)					TOM MA- TERIAL (UG/KG)				
DATE	JUN 1988	<10					<10					<10					<10					<10				
20...																	TOM MA- TERIAL (UG/KG)					TOM MA- TERIAL (UG/KG)				
DATE	JUN 1988	<10					<10					<10					<10					<10				
20...																	TOM MA- TERIAL (UG/KG)					TOM MA- TERIAL (UG/KG)				
DATE	JUN 1988	<10					<10					<10					<10					<10				
20...																										

## 301143093171000 - PRIEN LAKE CUT AT BAYOU D'INDE

SPE-CIFIC CON-DUCT-ANCE	PH (STAND-ARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
JUN 1988 20...	0745	20500	7.80	27.5	5.8	140	420
SILICA, DIS-SOLVED AS SI02)	RESIDUE AT 180 DEG. C DIS-SOLVED SOLVED (MG/L AS N)	NITRO-GEN, NITRITE NO2+N03 DIS-SOLVED SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + MONIA + DIS-ORGANIC DIS-SOLVED SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + MONIA + DIS-ORGANIC DIS-SOLVED SOLVED (MG/L AS N)	PHOSPHOROUS DIS-ORGANIC DIS-SOLVED SOLVED (MG/L AS P)	CADMIUM TOTAL CADMIUM DIS-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOTAL CADMIUM DIS-ERABLE (UG/L AS CD)
JUN 1988 20...	8.5	13300	<0.01	0.02	0.02	0.3	0.07
CHRO-MIUM, RECOV. FM BOT-TOTAL TOM MA-TERIAL (UG/G AS FE)	IRON, DIS-SOLVED SOLVED (UG/L AS FE)	IRON, RECOV. FM BOT-TOTAL TOM MA-TERIAL (UG/G AS FE)	IRON, RECOV. FM BOT-TOTAL TOM MA-TERIAL (UG/L AS PB)	IRON, RECOV. FM BOT-TOTAL TOM MA-TERIAL (UG/L AS PB)	LEAD, RECOV. FM BOT-TOTAL TOM MA-TERIAL (UG/L AS MN)	MANGANESE, RECOV. FM BOT-TOTAL TOM MA-TERIAL (UG/L AS HG)	MANGANESE, RECOV. FM BOT-TOTAL TOM MA-TERIAL (UG/L AS HG)
JUN 1988 20...	8	430	60	4300	10	<5	50
MERCURY RECOV. FM BOT-TOTAL TOM MA-TERIAL (UG/G AS HG)	CARBON, ORGANIC DIS-SOLVED SOLVED (MG/L AS C)	DI-CARBON, TOT. IN BOTTOM MAT. (GM/KG AS C)	TETRA-CHLOROBROMO-ETHANE TOTAL (UG/L)	1,2-DI-CHLOROBROMO-ETHANE TOTAL (UG/L)	CHLORODI-BROMO-METHANE TOTAL (UG/L)	CHLORODI-BROMO-METHANE TOTAL (UG/L)	ACE-NAPHTH-YLENE TOTAL (UG/L)
JUN 1988 20...	0.23	2.2	31	0.6	<0.2	1.2	41
ACE-NAPHTH-YLENE BOT.MAT (UG/KG)	ACE-NAPHTH-ENE TOTAL (UG/L)	ACRYLIC ACRO-LEIN BOT.MAT (UG/KG)	ACRYLIC NITRILE BOT.MAT (UG/KG)	ANTHRA-CENE BOT.MAT (UG/L)	ANTHRA-CENE BOT.MAT (UG/KG)	BENZO B FLUOR-AN-THENE TOTAL (UG/L)	BENZO K FLUOR-AN-THENE TOTAL (UG/KG)
JUN 1988 20...	<420	<5.0	<420	<850	<5.0	<420	<10
						<850	<85
						<10	<850

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

DATE	JUN 1988	BIS	BIS	BIS	BIS	BIS (2-	BIS (2-
		2-	(2-	(2-	CHLORO-	N-BUTYL	CARBON
BENZO-A-PYRENE	20...	BENZO-CHLORO-ETHYL	CHLORO-ETHYL	CHLORO-ETHOXYS	ISO-PROPYL	BENZYL-PHTHAL-	PHTHAL-
		ETHER	ETHER	METHANE	ETHER	ATE	ATE
TOTAL BOT. MAT (UG/L)	20...	TOTAL BOT. MAT (UG/KG)	TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/KG)	TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/KG)	TOTAL BOT. MAT (UG/KG)
		<10	<850	<5.0	<420	<5.0	<420
DATE	JUN 1988	DI-BROMO-CHLORO-BENZENE	CHLORO-METHANE	CHLORO-ETHANE	CHLORO-FORM	CHRY-SENE	DIETHYLPHTHAL-
		TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/KG)	TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/KG)	TOTAL BOT. MAT (UG/L)	PHTHAL-ATE
JUN 1988	20...	<0.2	<85	<0.2	<85	<10	TOTAL BOT. MAT (UG/L)
		<420	<0.2	<85	<5.0	<420	<420
DATE	JUN 1988	DI-METHYL-PHTHAL-ATE	ETHYL-BENZENE	FLUOR-ANTHENE	FLUOR-ENE	FLUOR-ENE	DIETHYLPHTHAL-
		TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/KG)	TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/L)	PHTHAL-ATE
JUN 1988	20...	<850	<5.0	<85	<420	<5.0	TOTAL BOT. MAT (UG/L)
		<420	<0.2	<85	<420	<420	<420
DATE	JUN 1988	INDENO(1,2,3-CD) PYRENE	ISO-PHORONE	METHYL-BROMIDE	METHYL-BROMIDE	METHYL-CHLORIDE	DIETHYLPHTHAL-
		TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/L)	PHTHAL-ATE
JUN 1988	20...	<850	<5.0	<0.2	<420	<0.2	TOTAL BOT. MAT (UG/L)
		<420	<420	<5.0	<420	<30	<2500
DATE	JUN 1988	N-NITRO-SODI-PHENYL-LAMINE	N-NITRO-SODI-METHYL-LAMINE	NAPHTH-ALENE	NITRO-BENZENE	PHENAN-CRESOL	PHENAN-CRESOL
		BOT. MAT (UG/KG)	BOT. MAT (UG/KG)	TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/KG)	TOTAL BOT. MAT (UG/L)	TOTAL BOT. MAT (UG/KG)
JUN 1988	20...	<420	<420	<420	<420	<30	<2500
		<420	<420	<5.0	<420	<30	<420

	TETRA-	TRI-	TRI-	VINYL	1,1-DI-	1,1-DI-
	CHLORO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-
	ETHYL-	ETHYL-	FLUORO-	ETHYL-	ETHYL-	ETHYL-
	ENE	ENE	METHANE	IDE	ENE	ENE
DATE	TOTAL BOT.MAT (UG/L)	TOLUENE (UG/KG)	BOT.MAT TOTAL (UG/L)	BOT.MAT (UG/KG)	BOT.MAT TOTAL (UG/L)	BOT.MAT (UG/KG)
JUN 1988	20...	<85	<17	<85	<0.2	<85
	1,1,1,- TRI- CHLORO- ETHANE	1,1,1- TRI- CHLORO- ETHANE	1,1,2- TETRA- CHLORO- ETHANE	1,1,2- TETRA- CHLORO- ETHANE	1,1,2- PERYL 1 PERYL	BENZO A ANTHRAC
	CHLORO- ENE	CHLORO- ENE	CHLORO- CHLORO- ETHANE	CHLORO- CHLORO- ETHANE	ENE1,12 ENE1,12	ANTRAC
DATE	TOTAL BOT.MAT (UG/L)	TOLUENE (UG/KG)	BOT.MAT TOTAL (UG/L)	BOT.MAT (UG/KG)	-BENZOP -BENZOP	ENE1,2- BENZANT
JUN 1988	20...	<0.2	<85	0.3	<85	<0.2
	1,2-DI- CHLORO- BENZENE	1,2-DI- CHLORO- BENZENE	1,2-DI- CHLORO- PROPANE	1,2-NS-DI- CHLORO- ETHENE	1,2,4- TRI- BENZENE	DIBENZ
	CHLORO- BENZENE	CHLORO- BENZENE	CHLORO- PROPANE	CHLORO- ETHER	TRI- BENZENE	-ANTHRA
DATE	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	BOT.MAT TOTAL (UG/L)	BOT.MAT TOTAL (UG/L)	BENZENE TOTAL (UG/L)	-CENE TOTAL (UG/L)
JUN 1988	20...	<0.2	<420	<0.2	<85	<5.0
	1,3-DI- CHLORO- BENZENE	1,3-DI- CHLORO- BENZENE	1,4-DI- CHLORO- BENZENE	2-CHLORO- VINYL	2-CHLORO- NAPH-	CHLORO-
	CHLORO- BENZENE	CHLORO- BENZENE	CHLORO- BENZENE	ETHYL VINYL	NAPHTHALENE	PHENOL
DATE	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	BOT.MAT TOTAL (UG/L)	ETHER	BENZENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)
JUN 1988	20...	<0.2	<420	<0.2	<10	<10
	2-NITRO- PHENOL	DI-N- OCTYL PHTHAL- ATE	2,4-DI- CHLORO- PHENOL	2,4-DI- METHYL- PHENOL	2,4-DI- NITRO- TOLUENE	2,4- DI- NITRO-
	PHENOL	PHTHAL- ATE	CHLORO- PHENOL	PHENOL BOTTOM	BOT.MAT TOTAL (UG/L)	PHENOL
DATE	TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	PHENOL
JUN 1988	20...	<420	<10	<850	<5.0	<420
						<20
						<1700

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

MALA-	METH-	METHYL	METHYL	MIREX.	PARA-	TOXA-
THION,	OXY-	TRI-	PARA-	THION,	PER-	PHENE,
TOTAL	CHLOR,	THION,	THION.	TOTAL	THANE	TOTAL
IN BOT-	TOT. IN	TOT. IN	TOT. IN	IN BOT-	IN BOT-	IN BOT-
TOM MA-	BOTTOM	BOTTOM	BOTTOM	TOM MA-	TOM MA-	TOM MA-
DATE	TERIAL	MATL.	MATL.	TERIAL	TERIAL	TERIAL
JUN 1988	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)	(UG/KG)

20...	<10	<10	<10	<10	<10	<10
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301127093172400 - PRIEN LAKE AT NORTHWEST SHORE

SPE-CIFIC CON-DUCT-ANCE	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM, DIS-SOLVED (MG/L AS CA)	SODIUM, DIS-SOLVED (MG/L AS MG)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
DATE JUN 1988	TIME 0810	TIME 20600	8.10	27.5	6.5	180	460
20...						4,000	140
SILICA, RESIDUE AT 180 DEG. C (MG/L AS SOLVED AS SI02)	NITRATE NO2+N03 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + SOLVED (MG/L AS N)	PHOS-PHOROUS DIS-SOLVED (MG/L AS N)	CADMIUM TOTAL RECOVERABLE (UG/L AS P)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TERIAL (UG/L AS CR)
DATE JUN 1988	TIME 7.0	TIME 14000	<0.01	<0.02	0.03	0.28	0.07
CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	IRON, FM BOT-TOM MA-TERIAL (UG/L AS PB)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	LEAD, FM BOT-TOM MA-TERIAL (UG/G AS MN)	LEAD, FM BOT-TOM MA-TERIAL (UG/L AS MN)	MANGANESE, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)
DATE JUN 1988	TIME 9	TIME 340	60	5800	<5	<5	<1
MERCURY RECOV. FM BOT-TOM MA-TERIAL (UG/G AS HG)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	DI-CHLORO-BROM-METHANE TOTAL (UG/L)	CARBON-TETRA-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-BROM-Ethane TOTAL (UG/L)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L)	CHLORO-BROMO-METHANE TOTAL (UG/L)	ACE-NAPHTH-YLENE TOTAL (UG/L)
20...	<0.1	2.4	39	<0.2	<0.2	2.0	<0.2

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

				PARA-CHLORO-META	PHENAN-THRENE	PYRENE	PYRENE	TETRA-CHLORO-ETHY-
				CRESOL TOTAL (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	ENE LENE
				BOT.MAT (UG/L)	(UG/KG)	(UG/L)	(UG/L)	TOLUENE BOT.MAT (UG/KG)
NAPHTH-ALENE	NITRO-BENZENE	NITRO-BENZENE	BENZENE	- META	PHENAN-THRENE	1,1-DI-CHLORO-ETHYL-ENE	1,1,1-TRI-CHLORO-ETHANE	1,1,2-TRI-CHLORO-ETHANE
DATE BOT.MAT (UG/KG)	JUN 1988 20...	DATE BOT.MAT (UG/L)	BOT.MAT (UG/KG)	CRESOL TOTAL (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)
	<5.0	<1100	<30	<6500	<5.0	<1100	<5.0	<1100
						1,1-DI-CHLORO-ETHYL-ENE	1,1,1-TRI-CHLORO-ETHANE	1,1,2-TRI-CHLORO-ETHANE
						BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
TRI-CHLORO-ETHYL-ENE	TRI-CHLORO-FLUORO-ETHENE	TRI-CHLORO-FLUORO-ETHENE	VINYL CHLOR-IDE	1,1-DI-CHLORO-ETHANE	1,1-DI-CHLORO-ETHYL-ENE	1,1-DI-CHLORO-ETHYL-ENE	1,1,1-TRI-CHLORO-ETHANE	1,1,2-TRI-CHLORO-ETHANE
DATE BOT.MAT (UG/KG)	JUN 1988 20...	DATE BOT.MAT (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)
	<220	<0.2	<220	<220	<0.2	<220	<0.2	<220
						BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
1,1,2,2 -TETRA-CHLORO-ETHANE	1,1,2,2 -TETRA-CHLORO-ETHANE	1,1,2,2 -TETRA-CHLORO-ETHANE	BENZO G PERYL	BENZO A ANTHRAC	BENZO A ANTHRAC	1,2-DI-CHLORO-BENZENE	1,2-DI-CHLORO-BENZENE	1,2-DI-CHLORO-BENZENE
DATE BOT.MAT (UG/L)	JUN 1988 20...	DATE BOT.MAT (UG/L)	ENE1,12 ENE1,12	ENE1,12 ENE1,12	ENE1,12 ENE1,12	BENZANT BENZANT	BENZANT BENZANT	BENZANT BENZANT
	<0.2	<220	<10	<2200	<5.0	<1100	<220	<0.2
						BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
1,2-TRA NS-DI-CHLORO-ETHENE	1,2,4-TRI-CHLORO-BENZENE	1,2,4-TRI-CHLORO-BENZENE	DIBENZ -ANTHRA	DIBENZ -ANTHRA	DIBENZ -ANTHRA	1,3-DI-CHLORO-BENZENE	1,3-DI-CHLORO-BENZENE	1,4-DI-CHLORO-BENZENE
DATE BOT.MAT (UG/KG)	JUN 1988 20...	DATE BOT.MAT (UG/L)	BENZENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
	<5.0	<1100	<10	<2200	<0.2	<2200	<0.2	<1100
						BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)
2-CHLORO-NAPH-	2-CHLORO-NAPH-	2-CHLORO-NAPH-	CHLORO-PHENOL	2-NITRO-PHENOL	2-NITRO-PHENOL	DI-N-OCTYL PHTHAL-	2,4-DI-CHLORO-PHENOL	2,4-DI-METHYL-PHENOL
DATE BOT.MAT (UG/L)	JUN 1988 20...	DATE BOT.MAT (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	ATE ATE	BOT.MAT (UG/L)	BOT.MAT (UG/L)
	<5.0	<1100	<5.0	<1100	<5.0	<1100	<10	<2200
						BOT.MAT (UG/L)	BOT.MAT (UG/L)	BOT.MAT (UG/L)

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

ACE-NAPHTH-YLENE	ACE-NAPHTH-ENE	ACE-NAPHTH-ENE	ACRO-LEIN	ACRYLO-NITRILE	ANTHRA-CENE	ANTHRA-CENE	BENZO B FLUOR-AN-	BENZO K FLUOR-AN-
DATE BOT.MAT (UG/KG)	DATE BOT.MAT (UG/L)	DATE BOT.MAT (UG/KG)	DATE BOT.MAT (UG/KG)	DATE BOT.MAT (UG/L)	DATE BOT.MAT (UG/KG)	DATE BOT.MAT (UG/L)	DATE BOT.MAT (UG/KG)	DATE BOT.MAT (UG/L)
JUN 1988 20...	<580	<5.0	<580	<940	<940	<5.0	<580	<10
							<1200	<94 <10
								<1200
BENZO-A-PYRENE	BENZO-A-PYRENE	BENZO-A-PYRENE	BIS-CHLORO-ETHYL	BIS-(2-CHLORO-ETHYL)	BIS-(2-CHLORO-ETHOXY)	BIS-(2-CHLORO-ETHOXY)	BIS-(2-BENZYL-PHTHALATE)	CARBON TETRA-CHLORIDE
DATE TOTAL (UG/L)	DATE TOTAL (UG/KG)	DATE TOTAL (UG/L)	DATE TOTAL (UG/KG)	DATE TOTAL (UG/L)	DATE TOTAL (UG/KG)	DATE TOTAL (UG/L)	DATE TOTAL (UG/KG)	DATE TOTAL (UG/L)
JUN 1988 20...	<10	<1200	<5.0	<580	<5.0	<580	<5.0	<94 <0.2
CHLOROBENZENE	DI-BROMO-CHLORO-METHANE	CHLOROBENZENE	CHLORO-ETHANE	CHLORO-FORM	CHRY-SENE	CHRY-SENE	DIETHYL-PHTHALATE	DI-METHYL-PHTHALATE
DATE BOT.MAT (UG/KG)	DATE BOT.MAT (UG/L)	DATE BOT.MAT (UG/KG)	DATE BOT.MAT (UG/L)	DATE BOT.MAT (UG/KG)	DATE BOT.MAT (UG/L)	DATE BOT.MAT (UG/KG)	DATE BOT.MAT (UG/L)	DATE BOT.MAT (UG/KG)
JUN 1988 20...	<94	<0.2	<94	<94	<10	<1200	<94	<5.0 <580
ETHYL-BENZENE	ETHYL-BENZENE	FLUOR-ANTHENENE	FLUOR-ANTHENENE	FLUOR-ENE	FLUOR-ENE	FLUOR-ENE	HEXA-CHLORO-ETHANE	INDENO(1,2,3-CD) PYRENE
DATE TOTAL (UG/L)	DATE TOTAL (UG/KG)	DATE TOTAL (UG/L)	DATE TOTAL (UG/KG)	DATE TOTAL (UG/L)	DATE TOTAL (UG/KG)	DATE TOTAL (UG/L)	DATE TOTAL (UG/KG)	DATE TOTAL (UG/L)
JUN 1988 20...	<0.2	<94	<5.0	<580	<5.0	<580	<5.0	<5.0 <580
ISO-PHORONE	METHYL-BROMIDE	ISO-PHORONE	METHYL-BROMIDE	METHYL-CHLORIDE	METHYL-CHLORIDE	METHYL-CHLORIDE	N-NITRO-SODI-N-PROPYL-AMINE	N-NITRO-SODI-N-PROPYL-AMINE
DATE TOTAL (UG/L)	DATE TOTAL (UG/L)	DATE TOTAL (UG/L)	DATE TOTAL (UG/L)	DATE TOTAL (UG/L)	DATE TOTAL (UG/L)	DATE TOTAL (UG/L)	DATE TOTAL (UG/L)	DATE TOTAL (UG/L)
JUN 1988 20...	<5.0	<0.2	<580	<94	<0.2	<94	<0.5	260 12 <580 <5.0



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

	DI-N-CYANOPHENOL 2-NITROPHENOL BOT. MAT TOTAL (UG/KG)	DI-N-OCTYL PHTHALATE BOT. MAT TOTAL (UG/KG)	2,4-DI-CHLOROPHENOL ATE BOT. MAT TOTAL (UG/L)	2,4-DI-METHYLPHENOL PHENOL BOT. MAT TOTAL (UG/KG)	2,4-DI-IN-BENZENE BOTTOM MAT TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL BOT. MAT TOTAL (UG/L)	2,4-DI-NITRO-PHENOL TOLUENE TOTAL BOT. MAT TOTAL (UG/L)	2,4-DI-NITRO-PHENOL BOTTOM MAT TOTAL (UG/L)					
DATE	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988
20...	<580	<10	<1200	<5.0	<580	<5.0	<580	<5.0	<580	<5.0	<580	<20	<2300
2,4,6-TRI-CHLOROPHENOL TOTAL (UG/L)	2,4,6-TRI-CHLOROPHENOL TOTAL (UG/KG)	2,6-DI-NITRO-CHLOROPHENOL TOTAL (UG/L)	2,6-DI-NITRO-CHLOROPHENOL TOTAL (UG/KG)	3,3'-DI-CHLOROBENZENE TOTAL (UG/L)	3,3'-DI-CHLOROBENZENE TOTAL (UG/KG)	4-BROMOPHENYL TOTAL (UG/L)	4-BROMOPHENYL TOTAL (UG/L)	4-BROMOPHENYL TOTAL (UG/L)	4-BROMOPHENYL TOTAL (UG/L)	4-BROMOPHENYL TOTAL (UG/L)	4-BROMOPHENYL TOTAL (UG/L)	4-BROMOPHENYL TOTAL (UG/L)	4-BROMOPHENYL TOTAL (UG/L)
DATE	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988
20...	<20	<20	<2300	<5.0	<580	<25	<2900	<5.0	<580	<5.0	<580	<30	<30
4,6-DINITRO-ORTHO-CRESOL TOTAL (UG/L)	4,6-DINITRO-ORTHO-CRESOL TOTAL (UG/KG)	DINITROFLUOROMETHANE TOTAL (UG/L)	DINITROFLUOROMETHANE TOTAL (UG/L)	AROCLOR 1016 PCB TOTAL (UG/L)	AROCLOR 1016 PCB TOTAL (UG/L)	PHENOL (C6H-5OH) TOTAL (UG/L)	PHENOL (C6H-5OH) TOTAL (UG/L)	NAPHTHALENE TOTAL (UG/L)	NAPHTHALENE TOTAL (UG/L)	1,3-DI-CHLOROPROPENE TOTAL (UG/L)	1,3-DI-CHLOROPROPENE TOTAL (UG/L)	PENTA-CHLOROPHENOL TOTAL (UG/L)	PENTA-CHLOROPHENOL TOTAL (UG/L)
DATE	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988
20...	<3500	<5.0	<3500	<0.2	<0.1	<0.1	<5.0	<580	<50	<0.2	<0.2	<0.2	<0.2
1,2-DIBROMOETHYLENE TOTAL (UG/L)	1,2-DIBROMOETHYLENE TOTAL (UG/L)	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	AROCLOR BUTYL PHTHALATE TOTAL (UG/L)	AROCLOR BUTYL PHTHALATE TOTAL (UG/L)	BENZENE DINE TOTAL (UG/L)	BENZENE DINE TOTAL (UG/L)	BENZENE DINE TOTAL (UG/L)	BENZENE DINE TOTAL (UG/L)	VINYL CHLORIDE TOTAL (UG/L)	VINYL CHLORIDE TOTAL (UG/L)	AROCLOR 1221 PCB TOTAL (UG/L)	AROCLOR 1221 PCB TOTAL (UG/L)
DATE	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988
20...	<3500	<0.2	<5.0	<580	<5.0	<0.1	<5.0	<580	<50	<5800	<0.2	<0.2	<0.2
AROCLOR 1232 PCB TOTAL (UG/L)	AROCLOR 1242 PCB TOTAL (UG/L)	AROCLOR 1248 PCB TOTAL (UG/L)	AROCLOR 1254 PCB TOTAL (UG/L)	AROCLOR 1260 PCB TOTAL (UG/L)	AROCLOR 1260 PCB TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	HEXA-CHLOROBENZENE TOTAL (UG/L)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L)
DATE	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988	JUN 1988
20...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<580	<5.0	<580	<0.2	<0.2

DATE	TIME	CHLOR-DANE, TOTAL IN BOT-TOM MA- TERIAL (UG/KG)	DI-AZINON, TOTAL IN BOT-TOM MA- TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA- TERIAL (UG/KG)	DI-ETHION, TOTAL IN BOT-TOM MA- TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA- TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA- TERIAL (UG/KG)	LINDANE
JUN 1988	20...	<10	<10	<10	<10	<10	<10	<10
	20...	<10	<10	<10	<10	<100	<10	<10
	20...	<10	<10	<10	<10	<100	<10	<10

301404093144800 - CALCASIEU RIVER AT BUOY 130 AT LAKE CHARLES, LOUISIANA  
DUPLICATE SAMPLES

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/cm)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM, DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	FLUO-RIDE, DIS-SOLVED (MG/L AS CL)
JUN 1988	20...	0700	12200	7.40	27.0	5.4	80	260	2300
	20...	0701	---	---	---	80	260	86	1400
	20...	8.1	7780	0.01	0.03	0.08	0.38	86	4000
	20...	8.1	8000	0.01	0.03	0.11	0.36	86	4000
JUN 1988	20...	8.1	8000	0.01	0.03	0.08	0.04	<1	0.4
	20...	10	---	440	30	10000	5	<1	0.3
	20...	10	10	390	30	11000	5	<1	0.1

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

		MERCURY	CARBON, RECOV. FM BOT-	CARBON, ORGANIC DIS-	DI- CHLORO- BROMO- METHANE TOTAL (UG/L) (GM/KG AS C)	CARBON- TETRA- CHLORO- ETHANE TOTAL (UG/L)	BROMO- CHLORO- FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)
DATE	JUN 1988	20... 20... 20...:	0.1 0.1 0.1	0.14 3.2 3.5	45 <0.2 <0.2	<0.2 <0.2 <0.2	<0.2 <0.2 <0.2	<0.2 <0.2 <0.2	<0.2 <0.2 <0.2
ACE-	ACE-	ACE-	NAPHTH-	ACRYLO-	ANTHRA-	AN-	BENZO B	BENZO K	
NAPHTH-	YLENE	YLENE	ENE	ACRO-	CENE	AN-	FLUOR-	FLUOR-	
DATE	JUN 1988	20... 20...:	TOTAL BOT.MAT (UG/L)	TOTAL BOT.MAT (UG/L)	NITRILE BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/L)	THENE	THENE	
		<5.0 <5.0	<780 <760	<5.0 <760	<1600 <1500	<5.0 <5.0	BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	
BENZO K	BENZO-	BENZO-	2-	BIS	BIS	BIS	(2-	CHLORO-	N-BUTYL
FLUOR-	AN-	A-	CHLORO-	(2-	(2-	(2-	CHLORO-	CHLORO-	BENZYL
	THENE	PYRENE	ETHYL	CHLORO-	CHLORO-	CHLORO-	ISO-	ISO-	PHTHAL-
DATE	JUN 1988	20... 20...:	TOTAL BOT.MAT (UG/L)	ETHER	ETHYL	ETHYL	PROPYL	PROPYL	ATE
		<1600 <1500	<10 <10	ETHER	METHANE	METHANE	ETHER	BROMO-	ATE
CARBON	TETRA-	CHLORO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-	FORM	FORM	TOTAL
TETRA-	CHLOR-	CHLORO-	CHLORO-	ETHANE	ETHANE	ETHANE	SENSE	SENSE	BOT.MAT
IDE	IDE	BENZENE	BENZENE	METHANE	METHANE	METHANE	BOT.MAT	BOT.MAT	(UG/L)
DATE	JUN 1988	20... 20...:	TOTAL BOT.MAT (UG/L)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/KG)	(UG/L)	(UG/KG)	(UG/KG)
		<0.2 <0.2	<160 <150	<0.2 <0.2	<160 <150	<160 <150	<10 <10	<1600 <1500	<150 <150



TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

			DI-CHLORO-DL-		PHENOL-C6H-50H-	NAPHTH-C6H-	TRANS-1,3-DI-CHLORO-CELORO-	CIS-1,3-DI-CHLORO-CELORO-
DATE	JUN 1988	BOT. MAT (UG/KG)	DINITRO-ORTHOCRESOL TOTAL (UG/L)	AROCLOR PCB TOTAL (UG/L)	TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/L)	ALENE TOTAL (UG/L)	PROPENE TOTAL (UG/L)
20...	<4700	<30	<4700	<0.2	<0.1	<5.0	<780	<5.0
20...	<4500	<30	<4500	<0.2	<0.1	<5.0	<760	<5.0
			BIS(2-ETHYLHEXYL)PHTHALATE TOTAL (UG/L)	DI-N-BUTYL-PHTHALATE TOTAL (UG/L)	BENZI-DINE TOTAL (UG/L)	BENZI-DINE TOTAL (UG/KG)	VINYL CHLO-FLIDE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)
DATE	JUN 1988	BOT. MAT (UG/KG)	DIBROMO-ETHYLENE TOTAL (UG/L)	AROCLOR PCB TOTAL (UG/L)	TOTAL BOT.MAT (UG/KG)	TOTAL BOT.MAT (UG/L)	(UG/L)	AROCLOR 1,221 PCB TOTAL (UG/L)
20...	<4700	<0.2	<5.0	<780	<5.0	<780	<50	<7800 <0.2
20...	<4500	<0.2	<5.0	<760	<5.0	<760	<50	<7600 <0.2
			AROCLOR PCB TOTAL (UG/L)	AROCLOR PCB TOTAL (UG/L)	AROCLOR PCB TOTAL (UG/L)	AROCLOR PCB TOTAL (UG/L)	AROCLOR BENZENE BOTTOM TOTAL (UG/KG)	AROCLOR BENZENE TOTAL (UG/L)
DATE	JUN 1988	BOT. MAT (UG/L)	1232 PCB TOTAL (UG/L)	1242 PCB TOTAL (UG/L)	1254 PCB TOTAL (UG/L)	1260 PCB TOTAL (UG/L)	ADIDENE TOTAL (UG/L)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L)
20...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<780 <0.2
20...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<760 <0.3	<780 <0.2

TABLE 18.--CONCENTRATIONS OF INORGANIC CONSTITUENTS, TRACE METALS, VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS, INSECTICIDES, AND PHYSICAL DATA IN WATER AND BOTTOM MATERIAL FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE AREA, LOUISIANA, JUNE 1988--CONTINUED

IN SITU WATER-QUALITY MEASUREMENTS, JUNE 20, 1988

SITE NUMBER, TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL- INITY (PPT)
3 1415	3.0	35.3	6.9	4.4	25,900	15.7
4 0950	3.3 4.6 9.2	28.5 28.9 29.1	7.1 7.1 7.1	0.8 1.0 1.4	17,800 18,600 20,000	10.3 10.8 11.9
5 1030	3.3 6.3 11.2	28.9 29.2 30.2	7.2 7.1 7.2	2.3 2.0 1.9	17,400 19,200 22,400	10.1 11.2 13.2
6 1100	3.3 6.3 11.2	28.9 30.0 30.4	7.2 7.2 7.1	1.1 1.0 3.0	15,100 21,100 22,500	8.6 12.4 13.4
7 1115	3.3 6.3 12.9	29.5 30.1 30.5	7.2 7.2 7.2	0.5 0.3 0.6	18,600 21,100 22,700	10.8 12.4 13.5
8 1145	3.3 6.9 13.2	29.4 30.5 30.6	7.2 7.2 7.2	0.8 0.9 1.1	18,200 21,900 23,200	10.6 13.0 13.8
9 1220	5.0	29.7	7.3	4.2	21,900	13.0
10 1250	5.6	29.2	7.6	5.0	22,900	13.6
11 1305	5.3	29.3	7.6	4.8	22,100	13.1
12 1330	4.3	28.9	7.6	4.5	24,000	14.8

13 1350	3.3 9.9 19.8 29.7 39.6	28.7 28.1 28.0 27.1 26.5	7.7 7.7 7.7 7.6 7.6	3.8 3.0 3.0 0.9 0.5	28,700 31,000 31,000 36,000 36,500	17.7 19.4 19.4 23.0 23.6
14 0745	1.3	27.5	7.8	5.8	20,500	12.0
15 0810	2.0	27.5	8.1	6.5	20,600	12.2
16 0830	1.6	26.8	8.1	6.0	20,600	12.2
17 0700	1.6	27.0	7.4	5.4	12,250	6.7

FRACTIONATION OF DISSOLVED ORGANIC CARBON INTO HYDROPHILIC AND HYDROPHOBIC COMPONENTS FROM THE LOWER CALCASIEU RIVER, LOUISIANA

[ORGANIC CARBON, IN MILLIGRAMS PER LITER]

SITE NAME	DISSOLVED ORGANIC CARBON	HYDROPHOBIC FRACTION	HYDROPHILIC FRACTION
	MAY 21, 1988		
LAKE CHARLES AT BUOY 130	6.3	2.6	3.7
BAYOU D'INDE AT LITTLE BAYOU D'INDE	9.1	4.6	4.5
BAYOU D'INDE 0.25 MILE ABOVE INDUS- TRIAL OUTFALL	5.9	2.1	3.8
BAYOU D'INDE AT INDUSTRIAL OUTFALL	8.1	3.1	5.0
BAYOU D'INDE AT MOUTH	6.2	3.1	3.1

TABLE 19.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER, BOTTOM MATERIAL, AND TISSUE FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE, LOUISIANA, MAY 17 AND JUNE 21, 1988

3031404093144800 - CALCASIEU RIVER AT BUOY 130 AT LAKE CHARLES, LOUISIANA

DATE	TIME	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ACE-NAPHTH-YLENE BOT.MAT (UG/KG)	ACE-NAPHTH-ENE TOTAL (UG/L)
MAY 1988 17...	1440	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<5.0	<350
DATE	TIME	ACRO-LEIN BOT.MAT (UG/KG)	ACRYLO-NITRILE BOT.MAT (UG/KG)	ANTHRA-CENE TOTAL (UG/L)	ANTHRA-CENE BOT.MAT (UG/KG)	AN-FLUOR-AN-	AN-FLUOR-AN-	BENZENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)
MAY 1988 17...	<350	<140	<140	<5.0	<350	<10	<700	<14	<10	<10
DATE	TIME	BIS-(2-CHLORO-ETHYL) ETHER TOTAL (UG/L)	BIS-(2-CHLORO-ETHOXYSY) METHANE TOTAL (UG/L)	BIS-CHLORO-ISO-PROPYL	BIS-CHLORO-ISO-PROPYL	BROMO-PHTHAL-ATE	BROMO-PHTHAL-ATE	N-BUTYL-BENZYL	CARBON-TETRA-CHLOR-IDE	CHLOROBENZENE BOT.MAT (UG/KG)
MAY 1988 17...	<5.0	<350	<5.0	<350	<5.0	<350	<14	<5.0	<350	<14
DATE	TIME	DI-BROMO-CHLORO-METHANE TOTAL (UG/KG)	CHLORO-ETHANE TOTAL (UG/L)	CHLORO-FORM BOT.MAT (UG/KG)	CHRY-SENE TOTAL (UG/L)	DI-CHLORO-METHANE TOTAL (UG/L)	DI-CHLORO-METHANE TOTAL (UG/L)	DIETHYL-PHTHAL-ATE	METHYL-PHTHAL-ATE	DI-METHYL-PHTHAL-ATE
MAY 1988 17...	<14	<0.2	<14	<14	<10	<700	<14	<5.0	<350	<350
DATE	TIME	ETHYL-BENZENE BOT.MAT (UG/KG)	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	ADRIENE TOTAL (UG/L)	ADRIENE TOTAL (UG/L)	ETHANE TOTAL (UG/L)	ETHANE TOTAL (UG/L)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)
MAY 1988 17...	<14	<5.0	<350	<5.0	<350	<5.0	<350	<5.0	<350	<10



TABLE 19.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER, BOTTOM MATERIAL, AND TISSUE FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE, LOUISIANA, MAY 17 AND JUNE 21, 1988--CONTINUED

301230093181300 - BAYOU D'INDE 0.25 MILE ABOVE INDUSTRIAL OUTFALL CANAL

DATE	TIME	DI-CARBON-CHLORO-BROMO-CHLO-RIDE METHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-METHANE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	ACE-NAPHTH-YLENE TOTAL (UG/L)	ACE-NAPHTH-YLENE TOTAL (UG/L)
DATE	TIME	ACRO-ENE LEIN BOT. MAT (UG/KG)	ACRYLIC NITRILE BOT. MAT (UG/KG)	ANTHRA-CENE TOTAL (UG/L)	ANTHRA-CENE BOT. MAT (UG/KG)	AN-THENE TOTAL (UG/L)	BENZENE BOT. MAT (UG/KG)	AN-THENE TOTAL (UG/L)	AN-THENE TOTAL (UG/L)
MAY 1988	1615	1.2	<0.2	6.4	35	5.4	6.3	0.6	0.5
MAY 1988	17...	<500	<200	<200	<5.0	<500	<10	<1000	<20
MAY 1988	17...	BIS-2-(2-Chloro-Ethyl)-Ether TOTAL (UG/L)	BIS-(2-Chloro-Ethoxy) METHANE TOTAL (UG/L)	BIS-(2-Chloro-Ethoxy) METHANE TOTAL (UG/L)	BIS-(2-Chloro-Ethoxy) METHANE TOTAL (UG/L)	BIS-(2-Chloro-Ethoxy) METHANE TOTAL (UG/L)	BIS-(2-Chloro-Ethoxy) METHANE TOTAL (UG/L)	N-BUTYL BENZYL BENZENE TOTAL (UG/L)	CARBON TETRA-CHLOR-IDE BENZENE TOTAL (UG/L)
MAY 1988	17...	<5.0	<500	<5.0	<500	<5.0	<500	<20	<20
MAY 1988	17...	DI-BROMO-CHLORO-METHANE BOT. MAT (UG/KG)	CHLORO-ETHANE TOTAL (UG/L)	CHLORO-FORM BOT. MAT (UG/KG)	CHRY-SENE TOTAL (UG/L)	CHRY-SENE TOTAL (UG/L)	CHLORO-METHANE BOT. MAT (UG/KG)	DI-CHLORO-PHTHAL-ATE TOTAL (UG/L)	DI-METHYL-PHTHAL-ATE TOTAL (UG/L)
MAY 1988	17...	<20	<0.2	<20	<20	<10	<1000	<20	<20
271									
ETHYL-BENZENE BOT. MAT (UG/KG)		FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ANTHENE TOTAL (UG/KG)	FLUOR-ENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/KG)	FLUOR-ENE TOTAL (UG/L)	CHLORO-ADIENE TOTAL (UG/L)	CHLORO-ETHANE TOTAL (UG/L)	INDENO-(1,2,3-CD) PYRENE TOTAL (UG/L)
MAY 1988	17...	<20	<5.0	<500	<5.0	<500	<5.0	<500	<500

TABLE 19.—CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER, BOTTOM MATERIAL, AND TISSUE FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE, LOUISIANA, MAY 17 AND JUNE 21, 1988—CONTINUED



TABLE 19.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER, BOTTOM MATERIAL, AND TISSUE FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE, LOUISIANA, MAY 17 AND JUNE 21, 1988--CONTINUED

301224093174900 - BAYOU D'INDE 0.25 MILE BELOW INDUSTRIAL OUTFALL CANAL

DATE	TIME	ACE-NAPHTH-YLENE TOTAL (UG/L)	ACE-NAPHTH-ENE TOTAL (UG/L)	ACE-NAPHTH-ENE TOTAL (UG/KG)	ACRO-LEIN BOT.MAT (UG/KG)	ACRYLO-NITRILE BOT.MAT (UG/KG)	ANTHRA-CENE TOTAL (UG/L)	ANTHRA-CENE TOTAL (UG/KG)	BENZO-B FLUOR-AN-
MAY 1988 17...	1700	<5.0	<640	<5.0	<640	<260	<5.0	<640	<10 <1300 <26
BENZO K BENZO-K FLUOR-AN-AN- THENE TOTAL (UG/L)				BIS 2-	BIS (2-	BIS (2-CHLORO-	BIS (2-CHLORO-	N-BUTYL BENZYL	
				CHLORO-ETHYL	(2-ETHYL)	CHLORO-ETHOXO)	CHLORO-ETHOXO)	PHTHAL- PHTHAL-	
				ETHER	ETHER	METHANE	METHANE	ATE	
				TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	TOTAL (UG/L)	
MAY 1988 17...	<10	<1300	<10	<1300	<5.0	<640	<5.0	<640	<26 <5.0
N-BUTYL BENZYL PHTHAL-ATE BOT.MAT (UG/KG)				DI-BROMO-CHLORO-METHANE	CHLORO-FORM	CHRY-SENE TOTAL (UG/L)	CHRY-SENE TOTAL (UG/L)	DIETHYL PHTHAL-ATE	
				BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	BOT.MAT (UG/L)	BOT.MAT (UG/L)	ATE	
								TOTAL	
								BOT.MAT (UG/L)	
MAY 1988 17...	<640	<26	<26	<26	<26	<10	<1300	<26	<640 <5.0 <1300 <26 <5.0
DI-METHYL PHTHAL-ATE BOT.MAT (UG/KG)						HEXA-CHLORO-CYCLO-PENT-	HEXA-CHLORO-ETHANE TOTAL (UG/L)	INDENO (1,2,3-CD) PYRENE	
						ADIENE TOTAL (UG/L)	BOT.MAT (UG/L)	TOTAL (UG/L)	
								BOT.MAT (UG/L)	
MAY 1988 17...	<640	<26	<5.0	<640	<5.0	<640	<5.0	<640	<10 <1300 <26 <5.0 <1300 <26 <5.0
ISO-PHORONE TOTAL (UG/L)				METHYL CHLOR-IDEE	PROPYL-AMINE	N-NITRO-SODI-N-PROPYL-AMINE	N-NITRO-SODI-N-PROPYL-AMINE	NAPHTH-ALENE	
				BOT.MAT (UG/KG)	BOT.MAT (UG/KG)	TOTAL (UG/L)	TOTAL (UG/L)	BENZENE	
								TOTAL (UG/L)	
MAY 1988 17...	<5.0	<640	<26	<26	420	<5.0	<640	<640	<5.0 <640 <10 <1300 <26 <5.0 <640 <10 <1300 <26 <5.0

PARA-CHLORO-META-CRESOL TOTAL (UG/L)	DATE MAY 1988	PARA-CHLORO-META-CRESOL BOT.MAT (UG/KG)	PHENAN-THRENE TOTAL (UG/L)	PHENAN-THRENE BOT.MAT (UG/KG)	PYRENE TOTAL (UG/L)	PYRENE BOT.MAT (UG/KG)	PYRENE LENE	TOLUENE BOT.MAT (UG/KG)	TRI-CHLORO-ETHYL-	VINYL
DATE MAY 1988	DATE MAY 1988	1,1,1-TRI-CHLORO-ETHY-LENE BOT.MAT (UG/KG)	1,1,1-TRI-CHLORO-ETHANE BOT.MAT (UG/KG)	1,1,2-TETRA-CHLORO-ETHANE BOT.MAT (UG/L)	1,2-DI-CHLORO-IDE	CHLORO-FLUORO-				
DATE MAY 1988	DATE MAY 1988	1,2-TRA-NIS-DI-CHLORO-ETHENE TOTAL (UG/L)	1,2-TRA-NIS-DI-CHLORO-ETHENE TOTAL (UG/L)	1,2,4-TRI-CHLOROBENZENE TOTAL (UG/L)	1,2,4-TRI-CHLOROBENZENE TOTAL (UG/L)	1,2,4-TRI-CHLOROBENZENE TOTAL (UG/L)	1,2,4-TRI-CHLOROBENZENE TOTAL (UG/L)	1,2,4-TRI-CHLOROBENZENE TOTAL (UG/L)	1,2-DI-NITRO-TOLUENE TOTAL (UG/L)	1,2-DI-NITRO-TOLUENE TOTAL (UG/L)
DATE MAY 1988	DATE MAY 1988	2,-CHLORO-PHENOL TOTAL (UG/L)	2,-CHLORO-PHENOL TOTAL (UG/L)	2,-NITRO-PHENOL TOTAL (UG/L)	2,-NITRO-TOLUENE TOTAL (UG/L)	2,-NITRO-TOLUENE TOTAL (UG/L)				
17...	<30	<3800	<5.0	<640	<5.0	<640	<26	<26	<26	<26
17...	<30	1,1,1-TRI-CHLORO-ETHY-LENE BOT.MAT (UG/KG)	1,1,1-TRI-CHLORO-ETHANE BOT.MAT (UG/KG)	1,1,2-TETRA-CHLORO-ETHANE BOT.MAT (UG/L)	1,2-DI-CHLORO-IDE	CHLORO-FLUORO-				
17...	<26	1,2-TRA-NIS-DI-CHLORO-ETHENE TOTAL (UG/L)	1,2-TRA-NIS-DI-CHLORO-ETHENE TOTAL (UG/L)	1,2,4-TRI-CHLOROBENZENE TOTAL (UG/L)	1,2,4-TRI-CHLOROBENZENE TOTAL (UG/L)	1,2,4-TRI-CHLOROBENZENE TOTAL (UG/L)	1,2,4-TRI-CHLOROBENZENE TOTAL (UG/L)	1,2,4-TRI-CHLOROBENZENE TOTAL (UG/L)	1,2-DI-CHLORO-IDE	CHLORO-FLUORO-
17...	<5.0	<640	<5.0	<640	<10	<1300	<5.0	<640	<26	<26
17...	<26	2,-CHLORO-PHENOL TOTAL (UG/L)	2,-CHLORO-PHENOL TOTAL (UG/L)	2,-NITRO-PHENOL TOTAL (UG/L)	2,-NITRO-TOLUENE TOTAL (UG/L)	2,-NITRO-TOLUENE TOTAL (UG/L)				
17...	<20	<2600	<20	<2600	<5.0	<640	<25	<3200	<5.0	<640

TABLE 19.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER, BOTTOM MATERIAL, AND TISSUE FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE, LOUISIANA, MAY 17 AND JUNE 21, 1988--CONTINUED

L4-									
CHLORO-PHENYL	4-NITRO-ETHER	4-NITRO-PHENOL	4-NITRO-PHENOL	4-NITRO-ORTHOCRESOL	4,6-DINITRO-ORTHO-CRESOL	4,6-DINITRO-ORTHOCRESOL	PHENOL (C6H5OH)	NAPHTH-ALENE (C6H5OH)	TRANS-1,3-DI-CHLOROPHENOL
BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/KG)	TOTAL (UG/L)	BOT.MAT (UG/L)	PENTA-CHLOROPHENOL
MAY 1988 17...	<640	<30	<3800	<30	<3800	<5.0	<26	<5.0	<0.03 <0.03 <30
BIS(2-ETHYLHEXYL) PHTHALATE TOTAL (UG/KG)									
DATE	TIME								
MAY 1988 17...	<3800	<5.0	2400	<5.0	<640	<50	<6400	<5.0	12000 13 8600
301153093171900 - BAYOU D'INDE AT MOUTH NEAR SULPHUR, LOUISIANA									
DI-CHLOROBROMO-CHLORIDE TOTAL (UG/L)	CARBON-TETRA-CHLO-CHLORIDE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	BROMO-FORM TOTAL (UG/L)	CHLORO-METHANE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	BENZENE TOTAL (UG/L)	NAPHTH-YLENE TOTAL (UG/L)	ACE-NAPHTH-YLENE TOTAL (UG/L)	ACE-NAPHTH-ENE TOTAL (UG/L)
DATE	TIME								
MAY 1988 17...	1530	<0.2	<0.2	1.2	4.3	<0.2	1.2	<0.2	<5.0 <460 <5.0
ACE-NAPHTH-ENE BOT.MAT (UG/KG)	ACRO-LEIN BOT.MAT (UG/KG)	ACRYLONITRILE BOT.MAT (UG/KG)	ANTHRA-CENE BOT.MAT (UG/L)	ANTHRA-CENE BOT.MAT (UG/KG)	BENZO B FLUOR-AN-THENE TOTAL (UG/L)	BENZENE BOT.MAT (UG/KG)	BENZO K FLUOR-AN-THENE TOTAL (UG/L)	BENZO K FLUOR-AN-THENE TOTAL (UG/KG)	BENZO-A-PYRENE TOTAL (UG/L)
DATE	TIME								
MAY 1988 17...	<460	<180	<460	<5.0	<460	<10	<930	<19	<10 <390 <10 <930
2-CHLORO-ETHYL ETHER TOTAL (UG/L)	BIS(2-CHLORO-ETHYL) ETHER TOTAL (UG/L)	BIS(2-CHLORO-ETHOXYS) METHANE TOTAL (UG/L)	BIS(2-CHLORO-ISO-PROPYL) ETHER	BROMO-PHTHAL-ETHER TOTAL (UG/L)	BENZYL-PHTHAL-ATE TOTAL (UG/L)	N-BUTYL-BENZYL TOTAL (UG/L)	CARBON-TETRA-CHLOROPHENOL	BENZO-A-PYRENE TOTAL (UG/L)	CHLOROBENZENE TOTAL (UG/L)
DATE	TIME								
MAY 1988 17...	<5.0	<460	<5.0	<460	<5.0	<460	<5.0	<460 <19 <19 <0.2	<0.2 <19

DI-	BROMO-	CHLORO-	CHLORO-	CHLORO-	CHRY-	CHRY-								
	ETHANE	ETHANE	FORM	SENE	SENE	SENE								
DATE	BOT.MAT	TOTAL	BOT.MAT	BOT.MAT	BOT.MAT	BOT.MAT								
MAY 1988	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
17...	<19	<0.2	<19	<19	<10	<930	<19	<5.0	<460	<5.0	<460	<0.2		
DI-	BROMO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-								
	ETHANE	ETHANE	FORM	SENE	SENE	SENE								
DATE	BOT.MAT	TOTAL	BOT.MAT	BOT.MAT	BOT.MAT	BOT.MAT								
MAY 1988	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
17...	<19	<5.0	<460	<5.0	<460	<5.0	<460	<5.0	<460	<10	<930	<5.0		
DI-	BROMO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-								
	ETHANE	ANTHENE	FLUOR-	FLUOR-	FLUOR-	FLUOR-								
DATE	BOT.MAT	TOTAL	BOT.MAT	BOT.MAT	BOT.MAT	BOT.MAT								
MAY 1988	(UG/KG)	(UG/L)	(UG/KG)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)	(UG/L)
17...	<19	<0.2	<460	<0.2	<19	<0.2	<19	<0.2	<460	<5.0	<460	<0.2		
DI-	BROMO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-								
	ISO-	BROMIDE	METHYL	METHYL	METHYL	METHYL								
DATE	TOTAL	(UG/L)	(UG/KG)	(UG/KG)	(UG/L)	(UG/L)								
MAY 1988	(UG/L)													
17...	<0.2	<460	<19	<0.2	<19	<0.2	<19	<0.2	<460	<5.0	<460	<0.2		
DI-	BROMO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-	CHLORO-								
	NITRO-	BENZENE	NITRO-	BENZENE	PHENAN-	PHENAN-								
DATE	TOTAL	(UG/L)	(UG/L)	(UG/L)	THRENE	THRENE								
MAY 1988	(UG/L)				(UG/L)	(UG/L)								
17...	<5.0	<460	<30	<2800	<5.0	<460	<5.0	<460	<5.0	<460	<0.2	<19	<19	<19
TRI-	CHLORO-	FLUORO-	VINYL	1,1-DI-	1,1-DI-	1,1-DI-								
	CHLORO-	METHANE	CHLORO-	CHLORO-	CHLORO-	CHLORO-								
DATE	TOTAL	(UG/L)	(UG/KG)	(UG/KG)	(UG/L)	(UG/L)								
MAY 1988	(UG/L)													
17...	<0.2	<19	<19	<0.2	<19	<0.2	<19	<0.2	<19	<0.2	<19	<0.2	<19	<19

TABLE 19.--CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER, BOTTOM MATERIAL, AND TISSUE FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE, LOUISIANA, MAY 17 AND JUNE 21, 1988--CONTINUED

				TRANS-	CIS							
PHENOL (C6H- 5OH)	PHENOL (C6H- 5OH)	NAPHTH- ALENE TOTAL BOT.MAT (UG/L)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	1,3-DI- CHLORO- PROPENE TOTAL (UG/L)	PENTA- CHLORO- PHENOL TOTAL (UG/L)	DIBROMO- ETHYL- ENE TOTAL (UG/KG)	1,2- DIBROMO- ETHYL- ENE TOTAL (UG/L)	BIS(2- ETHYL- HEXYL) PHTHAL- ATE TOTAL (UG/KG)	BIS(2- ETHYL- HEXYL) PHTHAL- ATE TOTAL (UG/L)	DI-N- BUTYL PHTHAL- ATE TOTAL (UG/L)		
DATE	MAY 1988	<5.0	<460	<5.0	<0.2	<0.2	<30	<2800	<0.2	<5.0	<460	<5.0
	17...											
DI-N- BUTYL PHTHAL- ATE BOT.MAT (UG/KG)	BENZI- DINE TOTAL (UG/L)		VINYL CHLO- RIDE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	HEXA- CHLORO- BENZENE TOTAL (UG/L)	HEXA- CHLORO- BENZENE TOT. IN MATL. (UG/KG)	HEXA- CHLORO- BENZENE TOT. IN MATL. (UG/L)	HEXA- CHLORO- BENZENE TOT. IN MATL. (UG/L)	HEXA- CHLORO- BENZENE TOT. IN MATL. (UG/L)	XYLENE TOTAL WATER WHOLE TOT REC (UG/L)		
DATE	MAY 1988	<460	<50	<4600	<0.2	0.6	<5.0	<460	<5.0	<460	<0.2	<0.2
	17...											

TABLE 19.-CONCENTRATIONS OF VOLATILE AND METHYLENE CHLORIDE-EXTRACTABLE ORGANIC COMPOUNDS AND PHYSICAL DATA IN WATER, BOTTOM MATERIAL, AND TISSUE FROM THE LOWER CALCASIEU RIVER AND BAYOU D'INDE, LOUISIANA, MAY 17 AND JUNE 21, 1988--CONTINUED

[CONCENTRATIONS IN MILLIGRAMS PER KILOGRAM, WHOLE TISSUE BASIS.  
DASHES (---), NO DUPLICATE ANALYSIS MADE]

CONCENTRATIONS OF SELECTED MANMADE ORGANIC COMPOUNDS IN TISSUE SAMPLES,  
MAY 17 AND JUNE 21, 1988

	LAKE CHARLES AT RANGIA BED 5-17-88	6-21-88	BAYOU D'INDE AT MOUTH 6-21-88
DUPPLICATES	DUPPLICATES	DUPPLICATES	DUPPLICATES
BROMOFORM	*ND	**ND	**ND
CHLOROFORM	*ND	**ND	---
1,2-DICHLOROETHANE	*ND	**ND	---
HEXACHLOROBENZENE	*ND	**ND	---
HEXACHLOROBUTADIENE	*ND	**ND	---
OCTACHLORONAPHTHALENE	*ND	**ND	---
OCTACHLOROSTYRENE	*ND	**ND	---
BENZOPYRENE	*ND	**ND	---
BENZOPERYLENE	*ND	**ND	---
NAPHTHALENE	*ND	**ND	---
PHENANTHRENE	*ND	**ND	---
FLUORANTHENE	*ND	**ND	---
PYRENE	*ND	**ND	---
CHRYSENE	*ND	**ND	---

\*QUALITY-CONTROL SAMPLE ANALYZED BY TENNESSEE VALLEY AUTHORITY LABORATORY:  
THE LOWEST LEVEL OF DETECTION FOR BROMOFORM, CHLOROFORM, AND 1,2-DICHLOROETHANE = 2.5 MG/KG FOR TISSUE.  
THIS METHOD USED A MODIFICATION OF U. S. ENVIRONMENTAL PROTECTION AGENCY (1979A) METHOD 624.

LOWEST LEVEL OF DETECTION FOR ORGANOCHLORINES = 2.5 MG/KG.  
LOWEST LEVEL OF DETECTION FOR POLYNUCLEAR AROMATIC HYDROCARBONS = 2.5 MG/KG.

\*\*QUALITY-CONTROL SAMPLE ANALYZED BY MISSISSIPPI STATE UNIVERSITY CHEMISTRY LABORATORY:  
THE LOWEST LEVEL OF DETECTION FOR BROMOFORM, CHLOROFORM, AND 1,2-DICHLOROETHANE = 0.005 MG/KG FOR TISSUE.  
THIS METHOD USED A MODIFICATION OF U. S. ENVIRONMENTAL PROTECTION AGENCY (1979A) METHOD 624.

LOWEST LEVEL OF DETECTION FOR ORGANOCHLORINES = 0.01 MG/KG.

LOWEST LEVEL OF DETECTION FOR POLYNUCLEAR AROMATIC HYDROCARBONS = 0.01 MG/KG.

## IN SITU WATER-QUALITY MEASUREMENTS, MAY 17, 1988

SITE NAME, TIME	DEPTH (FEET)	TEMP (DEG C)	PH (UNITS)	DO (MG/L)	SPEC COND (US/CM)	SAL (PPT)	ORP (MV)
CALCASIEU RIVER AT BUOY 130 1440	1.6 4.0	28.4 26.3	8.3 7.3	9.6 4.2	7,700 9,600	3.9 5.1	+213 +249
BAYOU D'INDE 0.25 MILE ABOVE INDUSTRIAL OUTFALL 1615	1.6	32.6	8.0	8.4	13,980	7.8	+148
BAYOU D'INDE 0.25 MILE BELOW INDUSTRIAL OUTFALL 1700	1.6	32.6	8.2	10.7	16,700	9.6	+143
BAYOU D'INDE AT MOUTH 1530	1.6	29.9	8.4	11.9	13,600	7.5	+148